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<210> 4168

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4168

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<210> 4169

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4169

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<210> 4170

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4170

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tctggaaatg gatttatata cagtcaacat aaataccccc ttagaaattg gtaatatatt 420
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 aaggagaagc tgaggaacga naagaaanct tcgacaaaga gaatgggnaa tgtacatgct 660
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<210> 4171

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4171

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 gctgattttc aaccaaataa aaaaaatcaa gtgcatttca gaagcttttg gaagagcagc 180
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 cacanggacc acaaaacaac tagccatgat gggagacagg agttttttac atggaaacat 480
 ggcacctgtg tttttatgtg gcaagatctt tatctatagg caanangtat gaaatttccc 540
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<210> 4172

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4172

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aagccctcca cccacgggtc ctttccttcc tggctcgcca catcttccaa gtccatntct 600
caactatgtg agggctcttt ttcaagttcc ctaaagcaca tccccaatgt tancctcanaa 660
gattatgttg cnagcccnaa a 681

<210> 4173

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4173

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ctgggtagaa aatacagcat ttccacagaa aaggacgaga tcttgtctga tgtggcatct 180
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gcaatggaca acactgttgt gatggaggaa atcacaaggt tgtgcaggac cagcgttccc 600
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<210> 4174

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4174

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gagtgcnagg tggcagtatt gtggggcgcc cgacgggagc cagagagctg tactggtcca 180
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aagacaaaaa cttacagaga aaagatggat tcttgtattg aagcctttgg taccacaaaa 540
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tcgtgcagtg gctaaagctg canagactat cattgatacg aagggtgtga ctgctctggt 660
cagcnatgct atccacaatg actttgcaag gatgactccc tctaaccttc ctccctgcta 720
atgatgattg caagncangg cctgaangac ntggta 756

<210> 4175

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4175

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 gtactgaatg gttgggagag atatgttagcg gctgaccctg aaggacgttg cagcccatgc 120
 tatggagacc tgattttatt ttgtaagagg tgggcaaccc ctgaagcatt ttagtgatgc 180
 gaacagatgt gtctgttacc aagcaaagcc agttaaagaa ggtcacagag gaggaatgat 240
 cacaaagagt ctgagaagcc aactggggcc aaacaagttt tagaacctct actggctgat 300
 gccaacatca tcagagatga actgttctta ccagaaactt ctctgctcct gacacccac 360
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 acagagagag caacancgac agcaacgaca gcgaaggatt gcaattaagg acaccgtgtc 720
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<210> 4176

<211> 565

<212> DNA

<213> Homo sapiens

<400> 4176

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 caaactgtat gtggttggag gaagagatgg actgaagact ttgaatactg tagagtgcta 180
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 ggtggtcgtg atgggaagtt cttgtctcaa atcagtagaa tgtttttgat cctcatacta 480

ataangtgga cactgtgttg cacagatgtc aaaanggaaa aggtggcntt aggagtgacc 540
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<210> 4177

<211> 563

<212> DNA

<213> Homo sapiens

<400> 4177

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tgcctagggga tcagccccac tgtcttttct ttgtataact aaatctgcat ttccaatgt 180
tgtcaatcac atttttctta gagctgaata tccaggctgt aattctctaa accctttttc 240
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nctaactgn ttgngaaat tcataaccag gcactcaaat atccttggtg gcctacgaaa 480
agttagtaag gnaataaatt ttgcctttgg tagggaagaa ctacaaaagt tgnnaatcct 540
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<210> 4178

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4178

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ctcttttaac acaagccttc cccttccttc caaaagcaga aagtcacaat gactctagta 180

ttttaaaatg aagaacccac gtgcggagga gtgaagccaa tatagtaata tctgaatgcc 240
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 aatgtagtat tgactcatgg gtcaattatt tttattttgc tgcttaaaac ttttgttttc 540
 cacattttcc tcaaagtgca tgtttttggt tttgnttttc ttaactagaa aaaatatccc 600
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<210> 4179

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4179

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 gggggctcga agtcccggc tgggggtccc cgatgccgcc cgggggtcct caagnttacc 600
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<210> 4180

<211> 831

<212> DNA

<213> Homo sapiens

<400> 4180

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gctccatccc tcagtgcacg tatgccttct gtagcagatt ctcactctag tcatttttct   180
gaatttagtt gttctgacct agaaagcatg aaaacttctt gtagtcatgg ttccagtgat   240
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aatcccccac atcagtgtag catttctgtg gttacccaaa ctgcttcctg ttcagaagtt   360
tcacagttga atcatattgc tgaagaacat ggtaacaatg gaataaaacc taatgttgat   420
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caaaagccgg gtttcattat cataatgcag atacattttc tgtgttcagc aaggcattgt   660
gtgtcatgtg gatcttaagt taccaaacta tgaagtgaag gcttttaaaa gtgcattatt   720
tttaaggnta ataaattttg aagagcaaag caangttttg tgtggtttgg cacaannaca   780
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<210> 4181

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4181

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aagcccagtg gtgcccagtt gcctccaggt cccagacctt tatgtggaca agaaaagctt 180
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<210> 4182

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4182

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 gaacagtcta cttttagaaa ttaacagtaa atacacaatc cagctgtaat cttaccctcc 180
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 aagtcctann acataaacac tgtgtggttc acaaaaanggn atagagacat tctctcaaga 600
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<210> 4183

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4183

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<210> 4184

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4184

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tttgccgccg ccgtcccgca gctgctgttt ccggagttgc cccttcccc tgttccgggg  180
caggagtccg caaagcgaag atccgcccgc cggttcccc tcatgtccga actgactaaa  240
gagctgatgg agctggtgtg gggcaccaag agcagccccg gtctctcgga caccattttc  300

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tgccgctgga cgcaagggtt tgtgtttagt gaatcagagg gatctgcatt agaacagttt 360
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 ttgagcgatt tcaatgcatt aaattcaaaa aagatngttc aanaagttta acaannattt 720
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<210> 4185

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4185

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 tcaaacttgg ctaagacatc agctacgacg gttcgacttt caatggcttt gtcgacgtgg 180
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 caacaagnga ctccang 617

<210> 4186

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4186

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<210> 4187

<211> 708

<212> DNA

<213> Homo sapiens

<400> 4187

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 cctttggatc ctgagctccc tgctctagac agtgatgggg attcagatga tggcgaaaga 660
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<210> 4188

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4188

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 aagcactgtg agacataagc tgttatttat caaaaaatat aattctaag ttgccccagt 540
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 cgtaactttt tattaataaa gcattgcatt acagttgagc aaaagataat gttgaaattc 660
 anaattgggg tgtagaaacg atactggagt atttgtgtca agcattgtca aaggaggaggaa 720
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<210> 4189

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4189

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caagtacgtc aagattctgt atgacttcac anncccgnaa tgccaacgag ctatcngtng 600
ctcaaggat 609
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<210> 4190

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4190

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attaatcaaa tctgttttaa gaaaattaat tacttgattt tgaaaactgt aagatatact 420
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caacatgaca atatagagga agagcaatta agattcccat acactttgac cctgttattc 600
catccttaag aaattatttc aaagaaatag ntcaatagag atgaaaagcn tantggnaca 660
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<210> 4191

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4191

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<210> 4192

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4192

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ccaaatgccg acattcactg actccaaggg gaccaangac atgggagaaa gctgtttann 660
gatnancctt aaaccaa 677
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<210> 4193

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4193

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<210> 4194

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4194

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 ccctctctgg cctggctcat ggtatggccc cctcccctgg tcgccccag ccgtcccacg 180
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 tgctccctgg gggtcaggtg ggcagcactg atgctcctgt ccctaagtgt ccatgtgtgt 600
 tttccccaag gatcagccan aggaggaacg ggggaaacan gagtctctc ctaaccatc 660
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<210> 4195

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4195

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<210> 4196

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4196

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 aaatTTTcct ggcaagaaaa agaggggaaa gaatTTTggg ngtcagtga gatnagcaat 720
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<210> 4197

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4197

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 ggagatgaaa ctggggctat cggctttgca ngctgggagc cccctcctgt anctgcctta 660
 tcttcnggta t 671

<210> 4198

<211> 389

<212> DNA

<213> Homo sapiens

<400> 4198

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 ataagcgcg caggggaacat ccggaggggc tgaagatgaa ggtgcccgcg catgggcccc 360
 cgctgattgc cagtcctct ngancccg 389

<210> 4199

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4199

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<210> 4200

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4200

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acancactgt aaattctgtg gaacagggag aanaactggc ccttgggggg gaaggcatcc   660
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<210> 4201

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4201

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<210> 4202

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4202

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<210> 4203

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4203

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<210> 4204

<211> 873

<212> DNA

<213> Homo sapiens

<400> 4204

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<210> 4205

<211> 577

<212> DNA

<213> Homo sapiens

<400> 4205

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 ccgagtttcc aagtgtggnt gcaagacca ttggngaatt caggagcaat gctggctatc 480
 aataccaact atttgcgggg gtaaatgtag acttgtnaa ggataattta agctagggac 540

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577

<210> 4206

<211> 505

<212> DNA

<213> Homo sapiens

<400> 4206

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<210> 4207

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4207

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 aatgtcaaaa gttacatcaa aaataatggc tctgattgtc catcatctca ttcatttaat 180
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gataaaaatg ggataaaggg aggtttgaaa agtgtttctt tattcacatc aaagctagca 360
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ccatctaatt tgggtaaant caccaaaggc acattantag gaaggacttc atattcttcg 480
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caaaaggcct aaagcgaact cctgtgccac caaaagcagt tctggagaaa agcttaactc 600
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<210> 4208

<211> 552

<212> DNA

<213> Homo sapiens

<400> 4208

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taccaggggg tactgacctt gatttctcct acaaggacca cactgccttt gngtttaatg 480
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gatatcatgc ca 552

<210> 4209

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4209

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ttcacaggat ggggaaacaa ggcaccgaag tgggaccaca gctcaaatcc tgtgtgactc 180
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aacaancctg aaatgcttgc aagggcangg gacaattcgg ggggaaacgt ctgg 654

<210> 4210

<211> 822

<212> DNA

<213> Homo sapiens

<400> 4210

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catttcttgg ggcacacttg attgaaaact gagacttctg aagagaaggc cagaagatac 180
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gaacatgatg catttgaaaa tattgttcaa tgcagcaaaa gtcagtttcc gttaaggcaa 600
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cagagcaaaa gggctatgaa ataaaagaac tccgttgaag tttactggga atggggactc 720
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<210> 4211

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4211

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gtttaatttt tataaacaaa aatagctata aagtacaaag ctgctgctgc atgcaacctt 180
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<210> 4212

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4212

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gtggttgggg aggccgccac actcttcctg actcacctca aggtacctgg caggtttgat  180
ctaccagcaa gtgcctgcct gcagggccac ctctggatga gtggggaggc caggtttgcc  240
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aatttacaga ttagaaaaac tgagactgag antggttaag ggactttgcc aagtctgtca  720
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<210> 4213

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4213

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aaaaaaagaa gttccagagg cccagacttg ctactggtgc ccagggggct gtggggcagc  180
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<210> 4214

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4214

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<210> 4215

<211> 839

<212> DNA

<213> Homo sapiens

<400> 4215

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gttcttcgtc tcaagaggaa ctgacttctg ttgagcactc aacacgccac agagaccagc   180
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gaaaacattt tcaactgctt atacaaaaac cctgaggcaa cttttaagct gatttgcttt   300
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gaattttgtg aaacaaatgt agnccccatc ataaggggca agatttgga caattgntaa   780
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<210> 4216

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4216

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<210> 4217

<211> 860

<212> DNA

<213> Homo sapiens

<400> 4217

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<210> 4218

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4218

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<210> 4219

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4219

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<210> 4220

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4220

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<210> 4221

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4221

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<210> 4222

<211> 745

<212> DNA

<213> Homo sapiens

<400> 4222

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accactgaag tcatcaggaa gtgtttggga gaatacgtgt ctgtgctgga tgctgttgaa   420
gcaggtcagg cggttggggg cccttcgttc ttagggcttc tccaccaagc ttctaaatgg   480
ggaatgccaa ctttgtgcca ggcacacact acctgctgag aactgtgga tgaacaaggc   540
gttgaccag ggctcactct gtagaggaag aagaccagag aatggntacc accaagacag   600
tgataagtgc tgcaacaagg ttcaanagct gcacaagaag tcccaaagg tagtggaanc   660
catcaatccg ggggcttaag gaaagaagct tttaaanggg aagattaaag ccancaaggt   720
gacnccaaaa aactggggta attcn                                           745

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<210> 4223

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4223

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gagaaaaaaa aaagaaaaaa aaccatatgt gtattagggt gactgagtgg tgacttcatt   60
tataataata cagagaatag ctataagctc attgacagta aaaacaacaa accaggattc   120
tactgtttga aaagaagttt cgttttaatt ttggaattta gaatgtgtat ttgcaaagtc   180
accaattttc atctaaaagg ttatattcta gttgtgtcac caaacatca aaaaacctta   240
aaaaagaagt aacttgcttt gtaggtttgt attgttgatc taaacctgat acatgcttca   300
tttaatcagg aataatcctt tttttctgc tggacatgta taaatttcac tggattgtat   360

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aaatTTTTat ctattgcctt aaacattttac atgatttctca atatgtttta gctgtacagt 420
 tttggtgttc atcttagagg attcttcagc agaagtgata tttctttact gttttgtgag 480
 gtaatactga ttttgaaaat atatataagc taaaaacagt atttcgttga tatcagtagt 540
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 tagaactgtt ttgtgttagca tggaaataat ctgtcagctt tttaaagtca ctaaagtgtc 660
 ctggattatc aacttgaagg naatTTTTtg aattacaaag ttgacaagtt gcctgggtgt 720
 antgggctca tgccctgtaa ncccaagcaa ccccggggct taaggtgggg aaggattgct 780
 tcaagcccaa ggagttttgn gaacaanccc ttggggcaac aatanncaaa aacccccaac 840
 ccctacnaa 849

<210> 4224

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4224

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 ttgacttctg ggcccaattc tcccttttac aaagccttga ttgaatctgg ccttggcaca 300
 gacttttctc ctgatgttgg atataatggc tacacgaggg aggcctactt tagtgtcggc 360
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 gatgaagtag ttgagaaagg atttgaagat gatcgaattg aggccttact tcataaaaatt 480
 gaaatacaga tgaaacatca agtctaccaa gctttgggct gatgctgaca tcatacatag 540
 ctcttctgctg gaaccatgat ggggaccctg tggagctctt gaagttggga aatcagttag 600
 ctaaattcag acagtgcctg caggaaaatc caaaaatttt gcaagaaaaa agtaaaacag 660
 tatTTtaagg aataaccagc ataagctgac tttatcgatg anggcaaatg acaagtnnca 720
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<210> 4225

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4225

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atttttagta gagatgaggg ttcacatgt tggtcaggct ggtctcgagc tcctgacctc   60
gtgatccctt caccctggcc ttccaaagcg ctgggattac aggcgtgagc taccgcatac  120
ggccgatctc aagtaatttt tttttttttt ttttaagagac ggagtctcgc tgtgtcgccc  180
aggctggagt gcggtggcgc gatcttggct cactgcaagc tccgcctccc gggttcacgc  240
cattctcctg cctcagcttc ctgagtagcc cacgctgggc taatttttgt attttttagta  300
gagatggggg ttcaccgtgt tagccaggat ggtctcgatc tcctgacctg gtgatctgcc  360
cgcctcggcc tcccaaagtg ctgggattta ctggtgtgag ccattgcgcc tggccacctt  420
tccccagctt tcttaagtca ctgcgcanag gtgagaggaa aaaggaaaag tgatacccaa  480
aataaaaggg cataagtata ctcatatgat tattgtatcg caggtggcat tgcctttang  540
ttcttgttta attttttaaa actgagataa cttgttaatc ataatatagt acagcttgta  600
cttgtgacct gaatttactt aggggtgctga acngtaatta acctganggg ggccaatgtc  660
atccaatcan taatgggttg gnaagagaga acaagnccta agctccggaa atgtggacca  720
a                                                                    721

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<210> 4226

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4226

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gtaagtcctc ccgcctcgca tgatggctgc ggtgccgccg ggcctggagc cgtggaaccg   60
tgtgagaatc cctaaggcgg ggaaccgcag cgcagtgaca gtgcagaacc ccggcgcggc  120

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ccttgacctt tgcattgcag ctgtaattaa agaatgccat ctcgtcatac tgtcgtgtaa 180
 gagccaaacc ttagatgcag aaacagatgt gttatgtgca gtcctttaca gcaatcacia 240
 cagaatgggc cgccacaaac cccatttggc cctcaaacag gttgagcaat gtttaaagcg 300
 tttgaaaaac atgaatttgg agggctcaat tcaagacctg tttgagttgt tttcttccaa 360
 tgaaaatcag cccttaacta ccaaagtatg tgttgtcccc agtcagccag tgggtggagtt 420
 ggtgttgatg aagggttttg gagcctgcaa gttgttgctc cgcttggttg actgctgctg 480
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 tgtgatggtt gggctggtga gcaagttatg ggttctctaa aaaggtgtct taaaaagggt 600
 gattttgta natgagcctt tgtttggatt gcttcaagan gtcnctagga ttcaacaaaa 660
 tgncttactt caaagaattt acctttncct tctga 695

<210> 4227

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4227

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 gttggactcc ttgatctgtg cagaaacact gaagaagtcg aggccattct gaatggggat 120
 gttgaaacgc tccagagtgg tgatcacggt cgcccaaadc tcagccgttt aaaacttgcc 180
 attaaatatg aagtaaaaaa attttagct catccaaact gccaacagca acttctctcc 240
 atttggatg agctttctgg ttacgacag cagacaatgg cggtaagtt ccttgtggtc 300
 cttgctgttg ccattggact gcccttctg gctctcattt actggtttgc tccatgcagc 360
 aagatgggga agataatgcg tggaccattc atgaagtttg tagcacacgc agcctccttc 420
 accatttttc tgggactgct agtcatgaat gcagctgaca gatttgaagg cacaaaactc 480
 cticctaata aaaccagtac agataatgca aaacagctgt tcaggatgaa aacatcctgc 540
 ttctcaagga tggagatgct cattatatcc tgggtaataa gcatgatatg ggctgaatgt 600
 aaagaaatct ggactcaagg cccaangaa tatttgtttg agttgtgna catgcttgat 660
 tttggnatgt tagcaaattt tcgcancatc aattcaatgc naagattcaa 710

<210> 4228

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4228

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gaaaaacaag ctcagcgatg gcgggctcca gaaggcagcg gtctaggcga ggacgcccgg   60
ctggaccagg agaccgcccc gtggctgcgc tgggacaaga attccttaac tttggaggca  120
gtgaaacgac taatagcaga aggtaataaa gaagaactac gaaaatgttt tggggcccga  180
atggagtttg ggacagctgg cctccgagct gctatgggac ctggaatttc tcgtatgaat  240
gacttgacca tcatccagac tacacaggga ttttgcagat acctggaaaa acaattcagt  300
gacttaaagc agaaaggcat cgtgatcagt tttgacgcc gagctcatcc atccagtggg  360
ggtagcagca gaaggtttgc ccgacttgct gcaaccacat ttatcagtca ggggattcct  420
gtgtacctct tttctgatat aacgccaacc cccittgtgc cttcacagt atcacatttg  480
aaactttgtg ctggaatcat ggtaactgca tctcacaatc caaagcagga taatggntat  540
aaggtctatt gggataatgg agctcagatc atttctcctc acgataaagg gatttctcaa  600
gctattgaag aaaatctana accgtggnet caagcttggg acgattcctt aattgatagc  660
agtccaattc tccacaatcc gagtgttcc aatcaataaa tggcctactt tgaagacctt  720
aaaaaagttc cggtttccac aaggggagcgt tnaacanggg agacaaaang gggaaatttt  780
tgttgcaaaa cctcctgtcc aaaggggggt ggggtccaaa anctttgn   828

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<210> 4229

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4229

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 ttcacaggtc ctacctatac tcaaaagggtg gtaggttata cagggtggat atagtgttga 180
 aagaaggaat gaatgaaatg aatgaattct gatagctgga agcacagcaa ctagcttttt 240
 ttgtagcatg agtgagagaa ggtattgagt tccttattga agaatgcagt tgcaacagtt 300
 tatcactagt gagctgcttc ttggtaacta taagacataa gcagacaaga aacagcaaga 360
 aaggaaggaa ggagaaaaga gaacgagaag gaaatcatta ttttgaccg atttccgggtg 420
 gtggtttcaa gaagtcttcc ccaccctcca gactgctgtc atttacaatt gctagagaac 480
 aagagctggg agcctctcct tggttctgct cctgtggcat agccatgggg gatgcagaag 540
 ggcantgggtg cccactaaag ggaatccccg tcagctttgg ntttaagttt ccagagattg 600
 agcctctgnc ttangctgag agaaatactt antgtgagtc cttaattgct ccnta 656

<210> 4230

<211> 377

<212> DNA

<213> Homo sapiens

<400> 4230

aattattatg tggaatctct taagttagca actaagaaaa agccttatag aaagactaca 60
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 ggagttgttc tgaggaaacc agtagattgg atgactgact ggagaatcca gaataacaaa 180
 tccattatcc agacatgttt acttttataat taagaagttt gttgattagg tcttaatttt 240
 caaatgcaaa caccaagctt tgaaaatatt gcatatacaa tgtattggnc accaatttaa 300
 taatatTTAA tttgaagtta attactgtta atccttctan aaaagttttt tttcttttaa 360
 taaaagtaca tanatat 377

<210> 4231

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4231

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gtgcgcctgc gcgcggcgcc gaggggacgg ggtccgactc agaaatggcg gcctccatgt 60
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gggctgctgc tcaggttctg ggaagtctctg gattgtttta tgacatgga ctccaagtac 180
agcagcaaca gcaaaggaat ctctcactac atgaatacat gagtatggaa ttattgcaag 240
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ttgccaaaaa attaggttca aaagatgtcg tgataaaggc acaggtttta gctggtggta 360
gaggaaaagg aacatttgaa agtggcctca aaggaggagt gaagatagtt ttctctccag 420
aagaagcaaa agctgtttct tcacaaatga ttgggaaaaa attgtttacc aagcaaacgg 480
gagaaaaggg cagaatatgc aatcaagtat tggctctgta gcgaaaatat cccaagagag 540
aatactactt tgcaataaca atgggaaagg tcatttcaag gtcctgtatt aatangaagt 600
tcacatgggg gtgtcaacat tgaagatgtt gctgctgaaa actcctgaag cagttaattn 660
aaggaaccta attgatattt gaaagaaagg catccaaaaa gggaacaaag ctctccanc 720
cttgcacaa gaaattggga attccaacc ctaataattg tgggaatcaa caannaagna 780
aaacaatggg ncaaagcttt t 801
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<210> 4232

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4232

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ggattatattt ttcccctttg gaataacttt tgtgaattat tataatgcag tttccctagt 60
aatatagtagc ttttcatttg aaccacatct tgactgatct gtattgtaat atatgtcagc 120
aggtaagggt gcctgctgga tcattttgag gacagaggca tgaggagca catctcttgt 180
gaagttgcag ccagatttgt aaccaaccct gaaattcatc agcttaattc atttatcagc 240
ttgattcatt catcattcat tgcttatatc caaagcaaag acggtaagaa aatgaattca 300
tcctgaaata taaagaaaag ggtctgaagg aacaaacacg attctcttat attttggggc 360
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tcatgagcct tgatagacag tttcctctcg tcttcatttc caccctcat cctcagtagt 420
 ctctctctcc ccacgcccc ncccaacttc ccccccaagc ttgagttaa gacagaatag 480
 ctaaagacag tgctgccttt acaatgcagt aattgccatc tttggggccg aaagacaagc 540
 tctgtgttgt gcttttcttg accaaccctt atcctgggct ctggagcttg tgtttccctg 600
 ctggcgactg taccttgggt aattggtgct acctccctg tttgctcant angaccctgg 660
 tccnggnngg caatt 675

<210> 4233

<211> 594

<212> DNA

<213> Homo sapiens

<400> 4233

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 agacctggcc ctttgcagtg atataaaatt tttcttgagg tgtctggaaa gatggctgaa 180
 taggaacagc tctgctctgc agctcccagc gagatcaacg cagaaggaga taatttctgc 240
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 ggaactccct cccctagcca agggaagctg tgagggactg tgccgtgagg aacggggcat 420
 tccggcacag atactatgct ttccccacgg tctttgcaac ccacagacca aggagattcc 480
 cttgggtgcc tgcaccacca agggccctgg gtttcaagca aaaanctggg cagccatttg 540
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<210> 4234

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4234

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tgctcttttg agcagctttg catgacacgc tctggtaaaa ggtgtgcatc tttaaattat 180
ttcatggata ctttgaaaaa tattgtatca cticaaatac agcaataagt ttatatgttc 240
tcaagatttc atttgttttt aagaatttta agttcgtgga ttaatatcac tacttgaata 300
ctgacagttg ttgattagac accgaaaggt tactgattgt tgaatgtatc tgtgttagag 360
ctgtgcactg gcacgcttgc atcangggct ggggccacac ggccgccaca cagattcccc 420
cgtgatgcct ggagctgctt ccanagccgg gtgtctccaa gaggcacctg taggacttcc 480
catttaagaa atctcttgag tgggtttgta ngttaccttc tccaaggntt atttaggaca 540
nagatattgc tgggaaggtc atgggtcaaa ttccctcaca acccaactcg tctgcgggtg 600
caancccant ccaaggn 617

<210> 4235

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4235

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tggaacgtct tcttgtcaca tggggatcag caaagaccg attttgtac caggcgtctg 180
ggggccttat ttctcagcca tggtagctgg gttctggctg aatgaagggt gtcagagcgt 240
tactggaaaa ttgatagacc acatggtaca aggccatgct gcttttccag aactacaagt 300
aaaggccaca gccagatgcc agagtatata tgcatatttg aacagtcacc tggatctgat 360
taagaaggct cagcctgtgg gtttccttac tgttgattta catgtttggc cagatttcca 420
tggcaaccgg tctcccttag cagatctgac actaaagggc atggtcaccg gattgaaact 480
gtctcaggac ctgatgac ttgccattct ctacctggcc acagttcaag ccattgcttt 540
ggggactcgc ttcantatag aagccatgga ngcancaagg gcactcaatc agtactcntt 600

tcctangtgg agg

613

<210> 4236

<211> 892

<212> DNA

<213> Homo sapiens

<400> 4236

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aagtttttgt tattgttggt caaaacatca tttttaagac ccgaggctct agtgctgcat 180
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tgggtttgcg tatttaacat cttgggtgag attgtgaaac tttctccgat aactttctac 360
ccatttataa ctttagtaat atacaatgtg acttttttta gtatccttgc tagtattggg 420
cattgtcatt gttttaatct ttgccaatct gatagttata agtgatactc atttaaattt 480
aaatcacaat atttcttttt taattgaaga aaaaatcagc attaggtgag gtttaccaag 540
cattgggtgt gattactggg tattgggtggc tcagacgtag gatgatggac tgttggcatg 600
atattgcctt gattgcctaa tctgtaactc ctaataaata ctggaaaatt agcttgcctg 660
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atcctggggc ccaagccagt tncatatgca tatnatatga atgacaaatg gaaaatgggt 780
aagacagcat gtancctggt cccctaataa aggggtactcc tangggcaaa agaccttgnt 840
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<210> 4237

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4237

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 cccatttct tctgagaagg acagagccaa tctactcctc ctgggttatg ctcaaggaag 180
 actagagggt ctgagttctg tccgcacaga atgggaccca ctggatgttc gctttggcac 240
 caaacagcct tatcaggtgt tcacagtggg gcactccgta agtgtagaca aagagcccat 300
 ggctgacagc tgcattctatg aatgcattcg gaataaaatc cagtgtgtgt cagtcaccag 360
 aataccacta aagtcaaagg ccatcagctg ctgcaggaat gttactgaag acaaactgat 420
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 agcacagact gaacttttgc cttcantaat aagctgccac ccaagtgggt ccattctgct 540
 agttggcaac aaccaaaggg gagttgcaa nttttgntat ggctctatcc cctattaaca 600
 tccaactgtt ggctgaaaga ccgcttacc angggaggaa tcttgcaaat tcaattaaan 660
 nttattttgg ntccctccaa gcaagttcct tgttcaaat gcaaatgggg gn 712

<210> 4238

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4238

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 ttcaaaaac ctggccgttc aggcacaaaa gaagatcttg ggtaaaatgg tgtccaaatc 180
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 gacagtcac aagctggcca ttctttatag gaataatcag tttaatcaag atgagctagc 360
 attgatggag aaatttaaga agaaagtcca tcagcttgct atgaccgtgg tcagtttcca 420
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 gatgctgcac caaatcattc agcgccacct cactgccaag tcacatggac ggggttaataa 540

tgtgtttgat catttttcag attgtgaatt tttggctgcc ttgtataatc cttttgggaa 600
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 aacatattag cacatgagtt aagantgggtg accngatcat ggatttaatt tgaagatggn 720
 gcactgctgg attttatgaa gggaaaaaag gaagaatttt cctaaagnat tacacaatat 780
 ttcaanaaan ggcttttacc caanttcaat ttgtca 816

<210> 4239

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4239

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 agacaaccac agaaagtttt gtttttgtca cattctactg ctactgtgtc aatggcagca 180
 ttttgatata ggtggaggga tgctcacatc aaccccataa tttgtgtcag cttctcctga 240
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 aaggtaaadc tcctcagatc ccttccagta catgtatgct ccaaggcctg ctctatgtag 360
 aacttttgga gccatcaacg tactgcttga ggttgctttg aacaaaaggt atttgacata 420
 agctctataa gatcaggagc tcttttttan tttattcatt gttctttatc ttctagagca 480
 ataatttgca aaatgactat ttattgaata aactaggacg gangtgaaaa ggaaagaaca 540
 agctcatcct tccaagggga agagagcagt atcccaaadc caaattgaag aaaatanaca 600
 tatatctatt caccangaag agatanaagg gaagacaggg cagaatttct gtgggtctta 660
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<210> 4240

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4240

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 tgcgggcggc tgcgcagcgg tgggcgagaa tgaggagacg gtgatcatcg ggctgcgact 360
 ggaggacacg aacgacgtgt cgttcatgga agggggggcg ctgcnggtga gcgaacggac 420
 ccgggtcaag ctgcggggtg tacggggcaa naacatcaat naacgaagac gtttggtccn 480
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<210> 4241

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4241

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 aagtttctgc ggcaactgaaa caaggccaaa ttacaccaac agagctctgt caaaaatgtc 180
 tctctcttat caagaagacc aagtttctaa atgcctacat tactgtgtca gaagaggtgg 240
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 gttgttgat caggagctc tactaatggg aaaaacaaat ttaagatgag tttgctatgg 480
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ctggataact gggaggggaag ctcaaggtgg gaantgcaac tggctggtat ccnggggttc 660
aaaatgctaa cccgggcttt tagggattaa ggtincaggg nggggnt 707

<210> 4242

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4242

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ggaaagntct tgtttgctag accgtaaagg gaacnaaaaa agggggattc tgccaaggaa 600
aatggggaat ggnttcatga gtctaaggaa gganntatca gagtatggng gaaacacacc 660
aaactacctg 670

<210> 4243

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4243

cttttcgcgg ccgggccccca gcatggctgc cccacaggct gagggcctgg cagctgctgc 60

gccctcgctt tcttgacatt ccctggcttc tgtgctctct tccccaggcc accccagcag 120
 acatgtttgc caaggccttt cgggtcaagt ccgacacggc catcaagggg tcggacagga 180
 gaaagcttcg agctgatgtg acaactgctt tccccaccct tggaactgat caagtctctg 240
 agttagtacc tggaaaggag gagctcaaca ttgtgaagtt gtatgctcac aaaggggatg 300
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 gcctgaaagg gaaaggggct tctctgtgct ccacacttan caaggaccac ttgtggcggt 660
 ctggaaacaa gtcctctcca ccttccattg ctccactggg ncctngnatt cagcanatnt 720
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<210> 4244

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4244

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 gtcagcagaa tctaaacccc tacattaaag ctttgcctcc cattctgtgg ttgtggtggt 180
 ggtaagaagg agatattggt accaagaaaa atttccaaaa ctattgagag agagagagag 240
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 tattccttgt tcttaccaag tgtacattta actcttgctg acatgttcag tgtatittat 360
 tacttttaat gctgtcttaa aatgaacatt ctttaaagtt ggacaggaag gtggcatttc 420
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aaaaatcagt atatatTTTA actTTTTgtg acatgctaac acattttcag aataattatt 660
gcatagtaga atttattact ccaagaanag aanngacctt acntcaattc aaatgaaggt 720
taagtaattt acatttcctg gggtaaaaaa ccgggntcta taaaattaaa gttagaag 778

<210> 4245

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4245

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tgctacctga aactagaaac acatttttaa ttctgcagct ctccaacag attattttgc 180
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tttgtgtctc tacttaagca gtgttgTTTT aaatgttact ggataattgt aacataatca 420
aattaaattt tatatttaac tgatacccaa gcatttgatg aaaacatgtt gcaggaatgg 480
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ggggacacta actggttggc tataaagggt caaaaaaggg agccaacaag ttgcctaatt 720
tgggnaatgt ttgaaaataa tcaacngggc taatttttaa gaggtatnga agccaaacct 780
tttancnaa 789

<210> 4246

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4246

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gatttctaga ggggtcccaga acgggttctt cccaggccga tccgcctgc ttcctgcccc 120
gtctctccac ccgcctcccg ccctctgtaa gggaccccga gggcggcgcc gga[^]aacacgg 180
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cctttgctcg cttcccccg gcctggagtg gctcctgtcg cttctggcgc tccgatttcg 300
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gctgatacca aagangaggc caagaagcgg actgtggctt gntgacctgt ttggtattgc 480
caaattttca gcttttatta aagctgaaac accttgnct gtttaaaacg ttcgacaagg 540
acttttttat gaacgttaac ggcacannat acgggttttt tggaaaaaaa aaaaggcang 600
anttcaacc gttcggcccc tttgtgaagg tccattcatg aaaccctcga ngttaaaagg 660
cc 662

<210> 4247

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4247

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cctttcctgc aagcaaacta aataaattgg agcaattgga ggaactgaac ctaagtggca 120
acaagcttaa aaccattccc acaaccatag caaactgtaa aaggctgcac acccttgttg 180
cacactccaa caacatcagc attttcccag aaatactgca gttgcctcag atccagtttg 240
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tacaagacct tgacctgact ggaaatacaa atctggttct ggaacacaag aacttgaca 360
tatttagcca tatcacaacc ctgaaaattg atcagaaacc tttgccaacc acagattcta 420
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tgtgtgtctc agcacttgct atggatagct ttgcaagagg ggttggganc tgtgtatggc 540
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 gtgcttttag aagaggtaca gcaagtcaac taatgacaca gnttttcaaa gggtaaacac 660
 cttctttggg aatcccacaa gggnaatttt nggaatggct ggggccaaaa aatttggggc 720
 gcccccggt cccccgggg ncnaaaatcc cggccccggn 760

<210> 4248

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4248

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 cagatccaga aagatggctg ccaatgagag aacgttctta ctaccgggga agaaagaagg 120
 gtaaaaagaa ggatcagatt ggaaaaggga cccagggagc aactgcagga gcttcatctg 180
 aactggatgc cagtaaaact gtgagcagcc caccacctc cccaagacct ggcagtgtgt 240
 caacagtatc tgcctctaca agtaacatca tcccccaag acaccagaaa cctgcagggg 300
 ctccagcaac anaaaagaaa cagcaacaga aaaagaagaa aggtggaaaa ggtggctggt 360
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 gttcttgtgt ttcaaattag ggaaacatct tcctcaaagt ctgcctagtg agatatggcc 540
 tactggttgc ctcatagctt tgtacaagat tacgaggact gaaaataatt gggcatttac 600
 ccatcttggg atcngttgng nncctttanc 630

<210> 4249

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4249

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gacagcaaaa tataatatta gcgtggcaaa gagccaggaa aattaaaaga catataaagg	120
gaagagatgg cgaaaagacc ctctagaaat atctaaaaat tcagatgtgt ggacacagaa	180
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ccatccaaaa ttggacaaaag gaacaaaaaa atctgccatg tgacaaattt aaagtttcca	360
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aaattctttt cattttgttt tggctctgta attaaacact caaagtgtat cagtagctaa	600
aacattactt caatacccac atttattctg gctagaaaat cattccattt tataccatgg	660
agcatccaag ttatttaatt aagaaaattt cccttaagat ttataccana tatgggnaaa	720
ggngtaaang ccaatgtinag gggcaaaaaca aaatgtctgc tgcggttggt gattttcaatt	780
tgcataat	788

<210> 4250

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4250

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ggcggacttg tttgcgcctc ccgttccctc ccaatttcca aacgtgtcac cccggcgccg	180
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gggagccggc ggnccgggcca cccgccggct ggggagagcc gccccccn gncgctcatg 480
 cctcttggnc ggagaccgag ccgcagccgg agcgctcctc cgtctcagac gcgccgcggg 540
 taggggacga ggtgccgggtg gncacggtga ctggagtcgg ggacgttttt caaggcggan 600
 aggcggncgc nacngaa 617

<210> 4251

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4251

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 cctcatgtct gccctgagcg cgggggtggaa atgctccctt ctgtgggctc cancagatcc 540
 cttgttttcc tgtcagtttg acncctcacc tggntccag ggaagantgc aganaaaagc 600
 aaggagagac tctagttaag a 621

<210> 4252

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4252

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agcatctgca tgtatcctct gaataatgaa gcaacatttc agcaattctg ttaaccacac 180
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cttcggctaa tgtgttagcc ttcaataagg gtgataaccc cttttcaacc taanctagtc 780
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gaa 843

<210> 4253

<211> 915

<212> DNA

<213> Homo sapiens

<400> 4253

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cagaaaagat cacactagct caccagcaat ggatccaaac aaagaatata tctctgaatt 120
gccagaaaaa gaattaagaa agtcaattat taagctactc aagaaggcac cagagaaagg 180
taaatatcaa cttaaagaaa tgttttgttt tttgtttttt tgagatggag tctcgtctta 240
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 gaaaaaataa ttttaaaata taaacaaacc ctccaagaag ttggggattg tgttaaata 780
 acaaaactta ggataaatgg ggttcttgag gagggaagag aaagctaaac cgtttgggaa 840
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<210> 4254

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4254

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 cagtgaaga acatcagtg atcagcacag caaatattcc aaatgccagg ctggattccc 180
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 taaaactaaa ggtaactgan catgccaant ggttgggggtg agaaaattgc atgngnga 780

ccaagacaca gaggcagcaa aaacccaagt gctgggaant caagagtgan aaaagt 836

<210> 4255

<211> 539

<212> DNA

<213> Homo sapiens

<400> 4255

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 cataatttga attaatatta attataccaa gttggnaaca ttgaaggaca catacagtgt 180
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 tccagcaagc tttgagtgtc tctgtaaagt gagcaaaaac atatcagtat acatnnctat 480
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<210> 4256

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4256

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 acctgcagaa cttagccaag agtctgggtc tccgggccaa cctgagggca accaagttgt 180
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 tgaatgaact gaagcaaccc atcaataagg gaaggggtca ggactccaag tacctccaaa 780
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<210> 4257

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4257

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 ttgaataata ggggtacctt ttcattcaag tttttatcat aattacctat tcttacacaa 180
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 acatgtatat gtataaatat tttaaagtgt gttttagaag cactttgtct acctaagctt 360
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 aaaaatggtn cagtttttaa gaattttcta ttaaccngca gggtaataat tagctnecat 720
 ctgcaagact ccaacaaaag cctaagttca actggaaagc ccaaagccn aattttaang 780

ggntttaat

789

<210> 4258

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4258

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 catctaagtc nancaacaag attccaacct ccaagnctgc tcaagccctt gcctcctgcn 660
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<210> 4259

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4259

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 acgaaacaca agaaacaaca gaaggggtgcc tggttaaataat gaatttctgg taagcaataa 180
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 agccccacac tttgggggnaa cttggctgtc tccaactcat cctcacttnc caaggctgga 660
 caaaggngat taaaaagaaa atgccaaagg ggggttgggca aggcaagaac cctgtttggc 720
 ntttгнаagg ngct 734

<210> 4260

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4260

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 ttaaaagagg ctctttggaa gtatatacat tattaacata atgtgtacaa gtccttttga 180
 aatgacaact ttaatgggtt tcagctcttt tatctagagc ttgagataat tcaagctgag 240
 tttttcaggg catatcaca cggcaaagtgt ttcagcagtg ggatatcaat gcttattttac 300
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 cattaaagca cagatcatta agcaataaaa accaaattgt ctgtcattca aattataact 420
 gcagttattt ttgcatggta agagtgagggt gctaattttg tgtgagatga actttgtaaa 480
 ctactttggg aaatgttctt tggaagtaag gttttttctc ctttagtctt atgcttccac 540
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agacttttgt tagaggagct atttggatga accaacattt cagattttcc aaaatgtaag 660
ttaggaagct ccaatggccc ctgcattaac aaaatacact gttacnacct aatcccaaga 720
gtgtcattac agtgagaatc cncanttaaa ngcattccag tggaaattat aanaat 776

<210> 4261

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4261

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tttatgtgca tgactgattc ttagaaaagcc aataagatag ggggtggagcc aagatggccg 240
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tgcattttcca gctgaggtac cgggttcac tcactgcgga ttgtcagaca gtgggtgcag 360
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caggggaattc cctttcctag ccaaggaaaag ggggtgacaga tggcacctgg aaagtcaggt 480
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caangcttga gttaggtaaa caaagtggcc gggaaactcn aactgggtgg agtccaccgc 720
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<210> 4262

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4262

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 ctccagtcct tctctttcgt cagtataaaa gattaaactc tacagaagaa tgcaatcaag 180
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 acattgagaa ctggccagat gctcttgggc tcaaggactc atactacact ttcttgggnag 600
 agcntgggac ctggccctga tgccttggna taatgaaaat tcaaactctg aatcaaggga 660
 cttccanac tgggtcaaaaa attttaacng caacaatttn gaagncatcc actttcaagg 720
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<210> 4263

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4263

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 atcctgaggg atttggttgg tattgttttt gggttttctt cttgaaactc agtattaaaa 180
 cactgaaaag tancagattt ttttctacct agagttttct gtttatccat catgagccca 240
 aataaagtca caattgtatg ttacctgctt tacaagaag ccatttatgt ttaattgact 300
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 atgagttgga catgaacctt ttagaaatga tttaaagtat aaaatcattt ctcacagggc 420

tttcaaaaca tanacctgtg atcagaaacc tggaatctag aaatttattc angacttgca 480
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 gcccgttagt atcaacagtt atggtacagn caactatgag agaaaccttt tagatttggc 600
 agctgtatca ttaataangt gtcattgggc caattcnaan attacagtaa tcnaaaaatg 660
 gg 662

<210> 4264

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4264

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 ggtggactac aaagacggct ganggagaag tacatcaagg ggccttcgct gagctaccgg 660
 ggaaaaagaa atatttgaca aaccaagctc cttttaaaaa ncgggaacn gggngnccgt 720
 tccggtgaag gganc 735

<210> 4265

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4265

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 cctgcttcaa tcttcaactg ctggaaaatt caattatata ttattggatc gatatgtttg 180
 ctacactata acccagaaca ttatgaaaac cagaaattat aattttatat ttaatatattt 240
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 tttctatacg tagattaataa agatatacat atctatcttt ttaaagttaa aaagggatta 480
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 aatgaaaagt tttcctaaaa ccacattcta ttgagtgaac acataagcca aggatggcgc 600
 atacttgccg atgagagtcn aggccatctg tgacgatatg antggctcgt ttctttgcac 660
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 aangggaa 728

<210> 4266

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4266

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 gagcaagcag ccctcgagaa gatagaatcc aaagctgac caagtatcct acagaacctg 120
 agagcacttg tagccatgaa tgaaaatctg aaaagtcaag aacaggaatt taaagcacat 180
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atacgtttac tacaggctcg aagaaatcga gaaatagcaa ttttgcaccg caagattgat 420
 gaagtcacct gacgtgccga gctaatacag tatcagaaga gatttattga accctaccgc 480
 cagatttcag cagtgcacaa agaaaccaag cagttcttca ctttatataa taccctggat 540
 gataaaaagg ttatttggaa aaagagatta gtctgctgaa ctcaattcat gagaacttct 600
 cacaggccat gggctccccct gctgcccggg accagttttt acgtcagatg ggaacagatt 660
 gtgggaaggg gattaagcan agnnnaatgg aagatgggaa angaaaaagc aagg 714

<210> 4267

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4267

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 gctttgctcc ttgttttttc cccggttctg ttttctcccc ttctccggaa ggcttgtcaa 180
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 tttcagaaga agacaaacat gtcagctgct gctggaagtg gcctggcctc tatttatctt 420
 cctgatcctg atctctgttc ggctgagcta cccaccctat gaacaacatg aatgccattt 480
 tccaaataaa gccatgccct ctgcaggaac acttccttgg gttcagggga ttatctgtaa 540
 tgccaacaac ccctgtttcc gttacccgac tcctggggag gctcccggag ttgttggaaa 600
 ctttaacaaa tccattgttg gctcgcctgt tctcaaatgc tcggagggtc tctttttata 660
 caagccaaga aaagacacca ngcatgnaag ggacaatgcg gcaaaagttt ctgangaaac 720
 atttncaagc aanatt 736

<210> 4268

<211> 766

<212> DNA

<213> Homo sapiens

<400> 4268

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gaatcatggtt aagaagatac agaggcagca aattgctgca gctcaacagg atgatcagga  180
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ccatccanaa gacatatatg ccacagatca agaangaaac ttaagtgtc ctgctcntgg  600
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ccaaccgatt taaatgtggc gacaaacagt atgaactggg caaaggaaat gcaaattttg  720
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<210> 4269

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4269

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gaagtctcat tctgtcactg agccttatag gtgtaatata tgtggcaaag aattttatga  180
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gcaaaacctg gaacgggtgt gtgaaaaatg tggaagaaaa ttcactcagc taagagagta  300

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 ctatgtctgt cctgtatgta gcgaagccta catagatgct cgaacactcc gtaaaccatat 480
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 atgcaggaac aagganaagc aagtgggcct caaggaactt gangactggt gggaagtgc 660
 aaggagaaaa ctattgggaa agcctccggg aaanctgggt ngcangctaa ctggaaagag 720
 gtttnccaa 729

<210> 4270

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4270

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 aaccaagata ccattttgct gctttgggaa agacctatta agangaggct tccaatatcc 660
 gaaaccatat cattctaca ggaaaatgga nagcaatgnc anccgggttt aaanctcctg 720
 gaaaagggtg ggaaatccca g 741

<210> 4271

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4271

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tcc 723
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<210> 4272

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4272

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tcagtttcac cagatacttc caaattgatc tccataacat gcataccaaa ttatattcct 180
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accagccatt tataggagtt cacatTTTTT ccataccctc ccaatcctgc cttggcagat 240
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 gtcccagcac tttggggaag ctgagtcgan cgggattgcn tgagggcagc agttcgagan 660
 cagcctggac taacatgggn gatgaaagta caaaattaac tggggggtgg tngggcaagg 720
 cctgcaatcc cagntacccg ggaaggntg 749

<210> 4273

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4273

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 aaaataagta gggcacatat aaatgtccaa agagacctaa accatTTTTg ctgtttcctg 180
 aggatacatg tcttttggcc ataactcttc tttacttttg tcctgtttgt cttaaaggta 240
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 ttccccaaan ggaangtaat angtttcc 688

<210> 4274

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4274

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gatgcaagca cttctctgga agactccttt gncattttac aactcantgg nggacaacac	780
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<210> 4275

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4275

aatacaagta ttagtagacccc atctgcacct tcgtcttctc catcctgggtc ctggggacaa	60
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 tgctcttcca gctcctgggc cagctctgga agggctgtat ttgggcctaa tcctcaacaa 660
 ctgttctacc actcgcaggg gcaaangtgg tnaagccacg gnacntcaan gggggaaggc 720
 tgggccccaa cg 732

<210> 4276

<211> 558

<212> DNA

<213> Homo sapiens

<400> 4276

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 ttgccaagta ctgtcccagt tttagcactg aaagtccac atctcaggaa acccttcagt 180
 cctgcgtaag caaggacaac tggtagcccc agatcgaagc tgtgcaatta ggaaggggac 240
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 gagaantaca gtcatttgct gcaggaatca actcgtcccc tagatatcgg ttcccttatt 360
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 cttacttttg agtttttcat ggttttccca gtcctccccg cccgccncaa caagcttccc 480
 ctctctaant gcaacaggaa ncctcctctt aaagggaang ttccctggnc tctatctcac 540
 tgctcttttc ccagagga 558

<210> 4277

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4277

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tccccgggggt gtaataatgt taactgagtt atattgggag ctagtttcaa gatgaaatac 180
taattctaag ccagtctatc catatgggga tggggaagcc ttggcattgt cttttttctg 240
ataacctttg gaccttttgt aatattttat ttgacatttt atatcctctg ctttgtgggt 300
gggggttttag tggttactct cctgcttgga aaaacaaact cagagaagta cctagaacag 360
tgtgaacact catttcttcc tccaacatca cctgggggttc ctaagtgctt agaagaaatg 420
aaacgggaag ccaggactat taagattgat agaagattga cgggtgccaa tataattgat 480
gaatctctcc agcaagttat ccagttttcc ttgagggatt atgtccagta ttggtattat 540
acactaagcg atgatgaatc ttttcttctt gaaattaggc agactcttca aaacgcactc 600
attcagtttg ctactangtc aaaagaaata gactgggcaa ccttatittta ctacacgcat 660
tgtagattga ctttggcaca cacttacgag tattcaanaa nggtcaaaca gaaaataacn 720
aggaaangat gatcaaagtg aaaaggtaca nca 753
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<210> 4278

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4278

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gccgcctcct ccttctctcc tcctcctctt cctcctcctc cctcgtctcc acagccatgt 120
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ctgcttagac cagagcagcc ccacagccaa ctagggcagc tgccgccgcc acaacagcaa 180
 ggacagccgc tgccgccgcc cgtgagcgat gacaggagtg tttgacagaa ggggtcccan 240
 catccgatcc ggcgacttcc aagctccgtt ccagacgtcc gcagctatgc accatccgtc 300
 tcaggaatcg ccaactttgc ccgagtcttc agctaccgat tctgactact acagccctac 360
 ggggggagcc ccgcacggct actgctctcc tacctcggct tcctatggca aagctctcaa 420
 cccctaccag tatcagtatc acggcgtgaa cggctccgcc gggagctacc cagccaaagc 480
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 cncaagcgcc accaaccagc caganaaaga agtgaccgag ccccaggtga gaatggtgaa 600
 tggcaaacca aagaaagttc gttaaaccbaa ggactattta ttccagcttt cagctgggcg 660
 cattacagag aaggttcaca agactcagta cctcgccttg ccgggacgcg ncgagctggc 720
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<210> 4279

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4279

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 cgaggatcatg ccactgcact ccagcatggg caatagagcg agactctgtc cccccgaaa 180
 aaaagaacaa gggctaaatt caaatcaaat tttccctgta ccctaagaaa aataattagg 240
 ccgggagatg tttgactaag tgagtaggca ttgttctgtg acggtctgag cccagacct 300
 ttcctctgga tgaatgctgt cccaggtaat gaaatgactt cacttattaa tatataggta 360
 cacagagttc aggtagatgt ggaatgaatg gggactcgcc ccgtctgccc ttgaatgtat 420
 ttagtggttt atgtgaaatg tacctttcaa agttgtctgt atgtttcata ctctgggggt 480
 gggaatataa atcattgcag cttttttgta gggcactttg gcagtactca tcaaaatatg 540
 cgatgtgcag atgcttagcc agcaactccg cttctatgaa tctagccaac agaaatactt 600
 gtagaagtgt gcagctataa atgtccacaa gaggtcaga gcctcattgt ttttaatagt 660

gaacagttgg naaccaaata gatgtctgtc agtagggatg tggcagaatt gtggcatgtt 720
 ttatatgggt ataaaaaagt attggangga acataaaccc aactggttgg naagaagtta 780
 acctctggga tncagnata aggtangggg tt 812

<210> 4280

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4280

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 cagttccggg caaaaacagc acgtcttaaa acttttactg ccaaccagat agatgaaata 180
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 gatgttcaga gacaagtttg ggattacctt tttggaaaag aaatgtatca ggttgatttt 300
 ttagatacta atattattat cactgaacca tactttaact tcacttcaat tcaagaatca 360
 atgaatgaaa ttctatttga agaataccag tttcaagcag tattaagagt aaatgctggg 420
 gctctcagtg cacataggta tttccgagat aatccttccc gaattatgct gtatcattgt 480
 tgatagtgga tattccttta cacatatagt tccttantgt anaagtaaaa agaaaaaaga 540
 agcaattatt cggataaatg tgggaggaaa actcttaacc aatcatctaa aggagatcat 600
 atcttacagg cagctacatg ttatggatga aacacatgtg attaatacaag tgaaagaaga 660
 tgtatgccan ggtgtcccaa ggatttttat agagacatgg atattgcana gttgnaaagg 720
 agaangaaaa ttcaagtaat natagaacta 750

<210> 4281

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4281

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aacaacttta gtacttggct ttgtgtgaaa gaaaacagaa ttccctatgt aatacccaac 60
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tacaattaag agtcctatit ttcactggat ctactagtgt aataaggatg ccatatacta 180
aagcatagaa aagttaaata tccattccct ataaaatcta agaaatacta tgcagtaata 240
tgtcataaat tgccaaataa taatttactg taatacagaa aaagatctgc acctatgtat 300
gaaaagattc tcagaaaact aagaataaag ggaaattcta acttgataca tcctgtgcac 360
ctcaagtcta tagcaaaagt tacatttcat tgagaaattt tgagcacaat ttaagtaaga 420
ggagaagata agaaagaaga aataaagttc actattcgta tatgatatag tcatttgtat 480
aaaatccaaa acagcaaact actagaactg agaaaattca gcaagggttg tctaataata 540
gattaattta taaaaagcag ttgttttttc tataccgaga gatcagcaat cttttttaaa 600
tgttttcagc tttgtgggcc atatggtctc tgtcataact ataactgctg atgtagtatg 660
aaagcagctt agacatcatg tcaagacatg ggcaatgcct gtgttccaat aaaagctttc 720
ttttagtaaa atngcaagcc ntgggatttt gggcctgtga gnccataaaa tttctaaacc 780
cccngccaat ttatcaaggg gggaaacccc aacttttigna aaa 823

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<210> 4282

<211> 521

<212> DNA

<213> Homo sapiens

<400> 4282

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tttaattgat gctaaccata gtgatgggag atcnttgctt atacaggaga acataattta 60
ttatcttatt ttaaaataaa cattacacta aaaccccaca tcatttcaag aaatgtgggc 120
aatagtagtt attttattat tatacgtaac ttttaaaaat aacaagatag acaaaatggt 180
tgagctacat gcacatgaaa agtgaaattt acaaaaagct taagaaatgg atccaaaagt 240
atatttaagc acttctcttg aaaccctcat aactaacana atatgaaaaa acaataaatg 300
tggtttataa accagaaagc ctaaaaaatc tcttctaatt ctatttttat taaaaatggt 360
tactcattaa tattttaatt ggaactttgc atcatctcag gtagaacgtg agtctcctgt 420

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cactatatatt anacaagaat gtcctaaaag nttgtcnatt ttctgaaaaa tagcctctgc 480
 tttcccaatg gttgctgctt gcttactnng aaatatgcaa a 521

<210> 4283

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4283

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 ctggacagga ctgaaggctg ctgccacctc tgcagcgctt gccattctca caccacccc 120
 tctgcccagt tttgctgcgt cgcgtgaagg atcctgcgct ggcgccccca cctggtgatg 180
 ccgagtccct ggggggtggtt tgctgtgact gcatgcggcg cgcagcgggt atatgtgcag 240
 gggaggagga gctatgtgcg caggggagga ggagagatgt gccagggga ggggcctgca 300
 actctggtca ctagaggttt ggggcatagg gtttgggaag gccaggaagc gtaaaggggc 360
 ttctgggggt cccgaagtag cacgggaggg tggggcaggg ctggtcacgc ctctgtgct 420
 cgggcagaac aacttcgagg agccagtggc actgcaggag atggacacaa gcaacgggggt 480
 cctattgccc ttttacgata ccgactccag catcgtctac ctgtgtggca agggcgacag 540
 cagcattcgg tactttgaga ttaccgacga gccgcctttc gtgcactacc tgaacacgtt 600
 cagcagcaaa gagccgcaac ggggcatggg gtttcatgcc caaaangga ctgggattgt 660
 caagcaaagt gttnagatnn ccccggtttc tacaanct 698

<210> 4284

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4284

atcatatgat atctaagtcc acattaagat gttccccaaa atatttggtt ttgaaccagg 60

attcagtcaa ggctcgtgca tttcatttag ttatatttct ttagtctctt aatgtaaaac 120
 tttccaccta ttatttttcc cctgtgtcat tgactttcta aagagaccag gcctgttcta 180
 ccaggatttt taaaaggggtg acattgccag aggggaagtta atgtttctct gaaggatat 240
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 taagttttgg cattaagtac tagagcatat attgtgtaaa tgtttccgcc agccaatgtg 360
 gctgatatct gttttaaagg tctcatttaa aatttagtgt ttttagtata agttactttt 420
 tggggacata aatatgcata tgatttggtt aaaaatttgg attgtaaata aaggtttatc 480
 tacctatgtg attcagttaa atttttaagt gttaagtggg gtgaattttg tgacactggg 540
 agaaagtttg catatcaggt atgaccttag aaagtaacaa atagatttgg tgcattacat 600
 cangcatgtg gaangataga tttgtccttc tgttcatgaa gaggtcattt acaaatttat 660
 naggagctaa actgactaag tacttgggaa atctgtactt gtaagctaata cacatttacc 720
 caaanccgga tttagnaata tanaagggct tttagggat tgtttggaan ttttaaaaan 780

<210> 4285

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4285

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 aactacccac atattttctt aatctcattt tttcagtttt tcttcatctt taaaagaggt 120
 tacatttcat tcctgggtcaa ctcttaaaaa gaattatgta atgttgggcc ttcataataa 180
 agagagagac tggttataag atcctttaca gtccattcat tttattctga tgtctaacca 240
 gatagacact agcaagcaaa acttccctct taatcctgga ccaaattgcat aattttactg 300
 tcactttcaa aaatctgtta tgactgaatc aaaatccttt taaagaaagg aaaaagctcc 360
 ttttgtgtca aatagttgaa caacatgaaa acagtatgag ccggttaaag atagattgaa 420
 tttttacttt acacatatga aaaacagtaa gttttgactg ctgtgtatgt tattcatgtt 480
 aatatgtgct cagttattca ctattgttaa tccacatata atcagttgct atccctgggt 540
 agacacacta tggaacttga aatgcacaat atttacattg ttagaggctt ctatccaaat 600

atctgcattc ctttaaaatg tgaactatTT gctggTgatt aacccaaaagg gaagattang 660
 tcatcagtgg gacatttttag ntttaangga aacaaattat taagaaatgg aatagaaaag 720
 ggngtccttt cctttggggn a 741

<210> 4286

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4286

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 aatttcactt gatcatgacc gtcgcgtccg agaagccaca caacaagctt ttgaaaaact 180
 tatccttaaa gttaaagaaac agttggctcc ctacttaaaa agtttaatgg gagattggct 240
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 ggcttttcct ccaagcaagc aacctgaagc catagcattt tgtaaggatg aaattacaag 360
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 cgctcagctt attttgagtt agtctctgca ttgtgccaac gcantccaca gttgatgaaa 660
 gaggaagcat ccaaagtgag cccatcagtt ctacntagca attgatgaca gtgaccaat 720
 ttgtctgccc aagctctccg gggaanctgt ncncnataca cttacaacta attggaggga 780
 ctgggtt 786

<210> 4287

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4287

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agaagctttt tcatttattc gtccaagcag catcttgtac tagtcctgac tggaaattta 60
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cttcgggaaa gtttatgtca cagagaaagt ggctcaaata aaacaaattc cctttgatgc 660
ctcaaaatta cacaagttcc ccgcagatgg caaccangc acaatntggn gggangatgg 720
ttctgg 726

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<210> 4288

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4288

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aaacaagaga agcgagatgg ttccaagcac aaatgatcct tatgtggctt ttagaaggcg 60
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gcttaagctg cgacgagatc taagtcgagc tgttactatt ctagagatga taaaaagaag 180
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agcaatggat gtgaaggagt tcaaagttta taagcaagat aaagccgac ttatccgacc 420

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gaaacggaaa tatgaaaaga agcccaaagt cttaccatcg tctgccgctg ctactcccca 480
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 tcccagctca gacgaagaac tctctcccag gttttgtctg gctcttcgga agctgangga 600
 agacaatgat cctgatggtc cttttgcctt ccgtanggaa agcaggctgt cagtactaag 660
 gcncctcact tagancaaaa ctgggaactg ggccttggnc aatnccc 707

<210> 4289

<211> 909

<212> DNA

<213> Homo sapiens

<400> 4289

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 agcttaataa aataaccgtc cccgccagtc agaagttgag gcagcttcaa aagatgggtc 180
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 aagtcccacc caaacccaaa ggcctccttg aggatgaggc tgattatgtg gtccccgtgg 660
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 caaggaacaa gcttaaggtc caaaacagtg ggggcctggg gaaaccaagt cacctccaac 840
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 ctggangac 909

<210> 4290

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4290

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gtagaaaacc aagagtgaga aggagttact gtgccggctg cagaagctgc acctccagca   60
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gctgcagtgc catgaggcag agctgcagca cctcagggat acggtggcct ccttcaaaga   180
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actgccactg ccaaagagtg gnctcttact caagagtcag gagctactca ccaagttaga   600
agacctgtgt gaagctgcan ctgctctacc aaggcatgca aggagggaac agaagaagct   660
tgattcaaga acccaanact ggtgtattta aaangaacaa ttttnnagat tccaacgaaa   720
naagctggc                                     729

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<210> 4291

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4291

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aaccaattgc accacgaccg gatggaagag cccagctgac acaaccaaga cgagtctcag   60
tgtctaggga agcttggggg tctgctcctt ttacttcagg cgaacctgaa ctcagttaat   120
gcaattttga agcatgccct gaatagattc agtcattatc aagtcaaact aaaaacgggt   180

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aaaggttgcg actattacca aataggaaaa acctgaagac ataagaacta cacatgagga 240
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 taacaatgac gacaacttca gtcagcagct ggccttactc ctcccacaga atgcgcttta 360
 taaccaatca tagcgaccaa ccgccacaaa acttctcagc aacaccaaatt gttactacct 420
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 tcgtgggact gggtgggaac ataatcgccc tctatgtatt tctgggtatt caccgtaaaa 540
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 gcctcccttt ccgaataatg tatcatatta accaaaacaa gtggacacta ggtgtgattc 660
 tgtgcaaggg tgtgggaaca ctgttttata tgaacatgta nattagcatt aatttgcctg 720
 gattcatcag tttggattgc tatataaaaa ttatccggtc tatacaagca accgganggc 780
 aataacaanc aagcaaaagt atttaggtcc ggttgtaaan ntangggatg ccttgc 836

<210> 4292

<211> 897

<212> DNA

<213> Homo sapiens

<400> 4292

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 tatctaacca gcctggagta tcnggaagac ttctgaagg aggagaaaac acctgggcta 120
 aatcttaaag gaagaccaga agctaccag ggaaagaagt gaaggaaggc attataaaca 180
 gagaggccag gagattccag cctcagcatt cccagagaag gcccaggatc tccctgagag 240
 gcccagttgg tgtttgtgga atcatcgctc ctctggtgat cacgcagttt gcctcacttt 300
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<210> 4293

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4293

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 caatctcaat tctctgccat cttctcccc gcccgcccat atacaattcg ttctcggtgg 660
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<210> 4294

<211> 519

<212> DNA

<213> Homo sapiens

<400> 4294

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gaagtccgag aaggagaagc atctggacga tgaggaaaga aggaagcgaa aggaagagaa 420
gaagcggaag cnaagagagg gaacactgtg acacggaggg agaggctgac gactttgatc 480
ctggggaana angtggangt gganccgccc ccagatcgg 519

<210> 4295

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4295

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cctgcctcat gccccattct caaccctggc tgggcctttt gcctttaatg aaatctggag 720
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<210> 4296

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4296

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 caacagtgat gagagagcgt ggcggctggc antgggcttc ctggctgtgt cctctgtgct 600
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<210> 4297

<211> 629

<212> DNA

<213> Homo sapiens

<400> 4297

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 gtctagcccc gccgtgggtg cctcctacct ccacgaggtc cagcctcact cccacactt 180
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 caatgaagac atggctgttg tctggaagct ctttaagagaa ggaaatgtga acattcaagc 420
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 tcaagcgtg cttagctgcc aggcatgt caatctgcag gaccacgatg gatcctcggn 540
 cctcatgctg gcctgtcacc atggnaacgt ggantgggtg cggctgctcc tggnacaccc 600
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<210> 4298

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4298

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 ggttctgcac ttatcacga gtcgcccctg gaagcagatt cccattgagt tttcccacc 180
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 atctattaaa aggagattca ggattttatt gggcacaggc ctttcttant aggaagaaag 540
 ggtgcttagc tttggacctg accgggtgtg tgtaaaacca tggactgagt cacagcagac 600
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gcctgcantt caagggctgg gantttgttt aanggaattg acctccaacc caactgcccc 720
aatgttccaa ctgggggctg gcccgaangc tgcaatggc aancctgaag gggcctgggc 780
aaaggaaang ggggccnaaa aaaat 805

<210> 4299

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4299

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<210> 4300

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4300

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 gacatgaaag ccacgacata caagattttt gcttcagaga aaccagaaa aatgtacatg 180
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 aagctgaagg gaaaatatat aaatatgac acatggaaaa atctgtcaac agtagttcct 420
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 aatgtaattt tgtggattca ttattcacac aaaaagagaa agcaaatatt gggacagAAC 540
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 aaataatcca tactaaagag acgcaattta aatgtgatat atgtggcaag atcttcaata 660
 aaaaatcaaa ccttgcaagt catcaaagaa ttcatacngg agangaagcc atttaaagt 720
 aatgaatgtg gcaangnct tccatatatg ncacacc 757

<210> 4301

<211> 861

<212> DNA

<213> Homo sapiens

<400> 4301

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 agataatcat gatatttaat cctatggagt gctgtgagga ttaactaaaa caatgcattt 180
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 acaatcaagn accgattttg aatccaccct ggtcctccaa tttacaaact gtgaaacctg 780
 gcctatccca anccaagact ccccttcaac ctccaatttc cggcncttg tanagcaaag 840
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<210> 4302

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4302

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 tttcaatgca tagttacaga aattcctgaa gattccccag gacttcaatt tcattgggtt 180
 ttatttgcag tttttagttg ctgtaattgt tgctgtttcc agtctaaagg acctcctttg 240
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 cagaaatatt taacagatta cttcttgata aaattttaat gggattatat gaatttataa 480
 tgccaattga aaatattata tacacaaaat ttgctatitt cacttaaagt aagcattttt 540
 aaaggattta ttttagaata caatctatgc aatcctcgaa ctgagtgtgc ttttcctga 600
 caggatatat aaaaaggtag attaggtcaa cctccttta agcttactct cccctcacct 660
 tttentttca ctggananaa acggnacttt cctgtgattc aaaccaacan gaggactttc 720
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<210> 4303

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4303

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taaagcttta gggtccaaga agattctggg actcaggaag aaaaagtgcc atcaggtgac  180
cagctgttgc atttcttgct tattctgttt tgtttttgca catcataatg gatttttctt  240
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atgagtgagt agtagctaga tgactagtat gtagttttat attttggtaa aattatttgc  420
cctttcagaa atgcctcacc taaagataca tgataatttt ggagttggag ggggccttag  480
aggctctcca gctctgcttc ttgcccattg ccaaatactg aaatggaagc ccgtcttacc  540
tggggtcact aactggtttg ttaactgagc taagaatang ctgtgggtcn cctcacttgt  600
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<210> 4304

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4304

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gtgaaatagc atagttatct tttgtctttt gttactagtg tgaacaaaga acggcgccta  180
acatataatg ggcatctagt aactctgtta gatgaaagac tctccaattt cagatcttct  240
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ctcagcttcc caaatagcta cgactacagg tgcattgcctc catgccctgc taattttctgt 480
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 gtggctcaac acctgggtta tccccagcaa tttttgggga aancccnagg gcaanggggg 780
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<210> 4305

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4305

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<210> 4306

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4306

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tgaccgaact gtacgtgaag gtgagagaaa agctgccaaag ctgcatttta gtcagttggg   180
caacagtga aattttcttt tagagggtgga aaaaagctct agggagaaga caatgaaaaa   240
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tgagtaaata cctggatgtg ggtgattcta nccagatcat ccctancaag ttaccttcan   780
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<210> 4307

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4307

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cagcagctct gctcggaag aaggcacggc ttctgctctt aagccaagt gtcttttcaa   180

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aggccttctt taaaatcgct cagatgggtg cttttgagtc tgcgggtctg gtttctgaaa 240
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<210> 4308

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4308

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gaaaaagcat tttaatgggt ggacacagta tttttgggna caaaaaaaaa angactcact 720
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<210> 4309

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4309

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 tgctacgcgg gttttaggat cagatacaag gaggatcnac caagaaatcc tgctggccca 660
 ctgtggggct tgttgggttc aaaccaaagc tatgggnnta antttccccg tcaatgggcc 720
 ncaatcccc cgggggaatt ccnatggntt gtg 753

<210> 4310

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4310

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cttcctgtgg tatactgatg agcagaactc ttccactaca tacctcaatt ttgcctaagg 180
agatatgtgc acgaactttc ttcaaaatca ctgcaccatt aataaacaaa aggaaagaat 240
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tgaggagatta caagcatttt gttccttggg gcaaaaaatc agatgttata tcaaagagat 360
ctggatattg taaaacaaga ttagaaattg gatttccacc tgtgttggag cgatatacat 420
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tgtaccttgg gatTTTTCAA tttcttttgn atttcgatca cttctacatt cccagcttgc 600
cacactcttt tttgatnaag ttgtgaaaca aatgggnact gcctttgaaa naaaancatg 660
t 661

<210> 4311

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4311

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tagactcttg cctgtcagag gagctgttga atgtttatatt gaaatgggct ttgaagaggg 180
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gtcatctcag caacctgcag ccagtacca gtttcttaca acaccatctt caaatcccag 360
tggtttaaac cagcacacaa ggaaccgtca agggcagtca tcagatccac catctgcttc 420
aacggttgct gctgactcag ccattctaga agttcttcag tccaacattc agcatgtgct 480
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aaaaaggaaa tcacaagaaa agttatcgag agctagaaaa ttggataaag atataatanc 600
cctgaagaaa cttttggaaa caaagatgtg gacggtgtgg cgagtgggcc aattgtttta 660
cactgggctg ccgancgtga gggtttgaag ctccgctatg tttgggatta cgcangacca 720
tgtctnggac agaagtcnat tctccttctc agcaan 756

<210> 4312

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4312

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caaagaatca aggcgatagt gccagaaagc agcctggctc atccacctcc agttcttctc 180
acctagcgaa gccttcagc agcagactgt gtgacaccag ttctgcaagg caggaaagta 240
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ctcctttgtc ccttagttgc cttcagctca gtactccaga aaatagagag agctctgttg 480
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tttgtgattc ttcaaagtgt tctaataaag attcttcaga agatgatata agtagaagtg 600
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aattctgttg gagaaatata ctcaaaantt gaggtgagga aaatcaaggc ttaaggttta 780
tccaaaaagg gtgaattcca atccgctcct ttgaaatgga ccgggcaaga catccaagtn 840
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<210> 4313

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4313

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gaaatctttt gatgcacatc ccaggaagga gagccaagtg cgacagcttg cgtgggtggg    60
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ttatcaacat ctacaggatg tggacattga gccittatgta agcaaaatgt taggtacttg    180
aaaactgggc ttctcttttg tgagaattac agctcttatg gtgtcttgta atcgtttg    240
ggtggggaca ggaaatgggtg tcattatctc catcccatg acagaaaccg taatcctcca    300
ccagggacgt ttactggggc tgagggcaaa taaaacctca ggtgtaccag gaaatcg    360
tggaagtgt atccgtgtat atggtgatga aaacagtgat aaagtgactc caggacatt    420
tataccctat tgttcaatgg cacatgcaca gctttgcttc catgggcacc gggatgctgt    480
gaaattcttt gtggcaagtc ccaaggtcaa agtcatcagc ccacaaagta gcagtagtgg    540
cacggatctg acgggtgaca aaagcaaggc catctgcaca aggagcctgg gtaatcannc    600
gcccttngaa gtctangctt gtcatcaagt ggn                                     633

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<210> 4314

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4314

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tacaagtgca atagcaaaac aggaagatgt ctctgttcag ctagaagcct tggatattat    120
ggctgatatg ttgagcaggc aaggaggact tcttgtaaat ttccatcctt caattctgac    180
ctgtctactt cccagttga ccagccctag acttgacagt aggaaaagaa ccattatcgc    240
tcttgccat ctggttatga gctgtggaaa tatagttttt gtagatctta ttgaacatct    300
gttgtcagag ttgtccaaaa atgattctat gtcaacaaca agaacctaca tacaatgtat    360
tgctgctatt agtaggcaag cgggtcatag aatagggtgaa taccttgaga agataattcc    420

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tttgggtgggt aaaattttgc aatgtagatg atgatgaatt aaaagagtac tgtattcaag 480
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 tataaatatt tgtcttaaat atcttaccta tgatccaaat tataattacg atgatgaang 600
 atgaaggatg aaaatgcaat ggatgctgat gggtggtgat gatngatgat caaggggagt 660
 gatgatgaat acagtganga tgatgacatg aatttggan gtganacgtg canctggcga 720
 aagtggcttg ggatgcctgg taanttaagc aacaagggca at 762

<210> 4315

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4315

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 aaccagcaaa catctccatc tgaggagctt ctattagaag accagatgag gcgaaaactc 180
 aaatTTTTTT tcatgaatcc ctgtgagaag ttctgggctc gaggtagaaa accatggaaa 240
 cttgccatac aaattctaaa aattgcaatg gtgactatcc agtacttgca gctatacaat 300
 gtctccgttg ggaatcatgc ttatgagaac aaaggtacca agcaatctgc tatggcaatc 360
 tgtcagcact tctacaagcg aggaaacatc taccctggaa atgatacctt tgacatcgat 420
 ccagaaattg aaactgagtg tttctttgtg gagccagatg aaccttttca cattgggaca 480
 ccagcagaaa ataaactgaa cttaacactg gacttccaca gactcctaac agtggagctt 540
 cagtttaaac tgaaagccat taatctgcag acagttcgtc atcaagaact ccctgactgt 600
 tatgacttta ctctgactat aacatttgac aacaagggcc atagtggag aattaaaata 660
 agtttagata atgacatttc catcagagga atgtaaagac tggcatgtat ccgggatcaa 720
 ttcagaagaa cactccatta catgangatc tttgntgcct ttggcattct gacttgcttg 780
 ggttcaataa ncccctgcat tanatntggg attaaggact caacttcaca 830

<210> 4316

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4316

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tgagattaa atgttctgag taagttagtt ttagacatt ttcttgtaag aaaatgttcc 120
atgctttact ctgttttga cttttcttt tgaaaaattt tgagatagaa accttaatat 180
catttcatat atttacagca catagttaat ttgagtagag tcaaattaat cttactttag 240
aatttgatta ctaagtatta gcatggataa taatgcttct ttgcttaaa tgtaaaaatt 300
aggccgtttt actaggtgta ctttgtctta atcatattcc tattttttta tacagctgtg 360
caacatatt gcttctggga aaaaatgtca atatgtggga aactgttcct ttgctcatag 420
tcctgaggaa agagaagttt ggacttacat gaaggagaat ggatacaag atatggagca 480
attttacgaa ctatggctca agagtcaaaa aaatgaaaaa agtgaagaca tagccagtca 540
gtcaaacaag gaaaatggaa aacaanttca catgccaaca gattatgctg aagttacagt 600
gggactttca ctgctggatg tgtgggaaaa ctgcaacagt gagaagcagt ggcagggcca 660
catctctccc gagaagcaca aagagaaggg ttccacacc ganggacgac cantacctgc 720
tgncaagcac ngccttccca acaaggctat ttcaggtatt ggtgacnagg tata 774
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<210> 4317

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4317

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tgccctggc aacggcctcc accgacggga tcggcttcgc catcgcccgg cgtttgccc 180
aggacggggc ccatgtggtc gtcagcagcc ggaagcagca gaatgtggac caggcgggtg 240
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ccacgctgca gggggagggg ctgagcgtga cgggcaccgt gtgccatgtg gggaaggcgg 300
 aggaccggga gcggttggtg gccacggctg tgaagcttca tggaggtatc gatatacctag 360
 tctccaatgc tgctgtcaac cctttctttg gaagcataat ggatgtcact gaggaggtgt 420
 gggacaagac tctggacatt aatgtgaang cccagccct gatgacaaag gcagtgggtgc 480
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 anacctggc catanagctg gcccgaagga acattanggt gaaactgcct aacacctgga 660
 cntatcaaag actancttca 680

<210> 4318

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4318

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 cttccttctt agtctccatc ttctccagga gccagaaaaa aaggagagag agagcatcag 120
 gtggcactgt ttatgggcct ttcatggaag tgacacctgg gggttacttct gcttatgttc 180
 ctttggacag aattcagttg aatggtcata ctagaggcat tgtgccaggc tttgcagcat 240
 aaaaagaagt tagagacagg gactttggat ccaagtcctc cctgactcaa aaccagaga 300
 ggcagaggat gcttgccacc ttgactagt cctatctcct ccaaagggtc cttttgattt 360
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 agccatccta catgcagcat gtgatgggcc cccagggact gaggacttgt gtatgactgg 600
 gagtctacgc aacttggctt catatcagtt cttgccatct cgggatccaa atgctctcca 660
 aggcataaag tcatttctc caaagagant ttgangatgc cccaagaaga atctttaagg 720
 ctaanggtca ctaattcctt aaagcctaaa gggcaacc 758

<210> 4319

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4319

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gatccttgtc ctttctctca aactccctga agaagctcgt cccctttcag ctccctgggt   60
cgaagagtga gcacaaagaa cccaaagata aaaagataaa catactgatt cctttgtctg  120
ggcgtttcga catgtttgtg agatttatgg gaaactttga gaagacgtgt cttatcccca  180
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aacaagttga actgatgaga gattaccgca ttaagtaccc taaagccgac atgcagattt  300
tgcctgtgtc tggagagttt tcaagagccc tggccctgga agtaggatcc tcccagttta  360
acaatgaatc tttgctcttc ttctgcgacg tcgacctcgt gtttactaca gaattccttc  420
agcgatgtcg agcaaataca gttctgggcc aacanatata tttccantc atcttcagnc  480
aagtatgacc caaagattgt ttatagtggg aaagttccca gtgacaacca ttttgccttt  540
actcagaaaa ctgggcttct ggagaaacta tgggtttggg atcacgtgta ttataaagg  600
gagatcttgt ccgaantggg tggctttgat gtttcaatcc anggntgggg ggctggaggg  660
atgtggggcc ttttcaacaa gggttgtcaa ggcaagtttg a                          701

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<210> 4320

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4320

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agagctcacc tgccaggcta caggttatcc tctggcagaa gtatcctggc caaacgtcag  180
cgttcctgcc aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt  240

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tctgcgccta aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgc 300
 gagggaaactt actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc 360
 aacttggctg cttcacattt tcatccctc ctgcatcatt gctttcattt tcatagccac 420
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 aagacctgtc accacaacaa agagggaagt gaacagtgtc atctgaacct gtggtcttgg 540
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 tctgaaacct gcaacaagga ctagccaaca cctggccatg aaacttgccc cttcactgat 720
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<210> 4321

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4321

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 aaataacata aattcaaaag gattccaatc tgaagcccaa atcgtttgcc tacataacaa 180
 aaatatctca tcttttctg cacattatta ttcttttatg ggttaaaaag aaaaatacct 240
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 gggtcattga ttatatagag agaaagacta agaaaagcta ttaattgcta ccaattttat 480
 gataagcttt aaggtttatg aaagtatgtt tttttattta atgagtaatg tccatttgaa 540
 gttgaaagaa aacatgaaat cctaattgta gttcatttta tgttcaaatg aaaccattgg 600
 ttttggtttt gntttgaaac agagtctcac tctgttgccc aaagggtggag agaagtggna 660
 cgcttttgtc ctcactggna aacctccaac tccccagggt tcaaagtga ntcncngng 720

cctcaaacct ccccaaaatt tataagg

747

<210> 4322

<211> 194

<212> DNA

<213> Homo sapiens

<400> 4322

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cctcctggaa tgaccttaaa tgagaagagt gttcaaaatt caattacaca gtggattgta 120
gacatggaaa ggtgatcagg taccttatat gaaggggaaa aatttcaact tccaattaaa 180
tttannantc cata 194

<210> 4323

<211> 883

<212> DNA

<213> Homo sapiens

<400> 4323

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agctgaaaaa cagaattggc tgcattccta ttttcacaaa tggtcagctg agacttctgg 120
ccgcagcaat gccatgccac atattaagac atatatgagg ccttctccag acttcagtaa 180
aattgcttgg ttccttgtca caagcgcaa tctgtccaag gctgcctggg gagcattgga 240
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gccatggata tggaacattc cttatgtcaa agcaccggat acgcatggga acatgtgggt 480
gccctcctga gaatcttgag gcactgtgaa atttaagtgt aagacattga gccacaaaca 540
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aaatctttcc aaaggtcact cttatgaatg gatgttggtt atacttttaa tggacattaa 660
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<210> 4324

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4324

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gacttacaga gagttccaag aaactatgat cctgctttac atccttttga ggtcccacga 120
gaatatgtaa gagcttttaa tgctacaaa ctggaacgag tatttgcaaa accattcctt 180
gcttcgctgg atggtcaccg tgatggagtc aattgcttgg caaagcatcc agagaagctg 240
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agtagtgta aatttaaccc aattgagaca tttctcttgg gaagttgtgc atctgacagg 660
aatatagtac tgtacgatat gaggcaagct accctttgaa aaaagggtat cttagatatg 720
agaacaaata caatctgttg gnaccctaag ggaagctttc anttttacan cangcaaatg 780
gaagnattat aa 792

<210> 4325

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4325

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tccataccca atgaaacctc aattcctaca gcaattctac ttttattgcc tcccaagaac 120
tatttcttca tgggtcaatat cactctttta aagctagcaa aatatgactt tcttctgagg 180
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ttaatttttg ttcctgtgta aaaattatta ttaatggatg gcagcccaaa ttactattct 600
tcttttaaaa tttgtttcaa gtgtgtcacc aggcaactcat aaaattcatt tatttggtat 660
ataactcaat gacctgaaat aataggtgct caatgcittt tcatttgatt ccttaaaaaa 720
caatttttat tccggtncaa aaaaaaatt cccccngcn aaaaatccca aaatggattt 780
acctggg 787

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<210> 4326

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4326

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cccagctctg cgagagccag gggaaaagga agagaggcag ggaaggaaag gcagcaagta 180
caaggtgatg aatgactgca ctggccattg cttcatgaag agccacgaaa aaacagagcc 240

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ggtttctcag caggtagctg gctgctcagt cacaaaggac ctctttggac aggctttatg 300
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 ctcaactttgt cttcttttctt ctgctgggtca aaatttgctg gctcgggcag ttaacgccct 420
 cacacatccg agtttgtgtca cctggccccct ttggtagcca ctggggaagc cagatctagg 480
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 caagcacctg tgatgtatgc actgcagtgt ccaaattgta aaaanacaaga aaggagata 660
 gaagcatatt tttttctgga gagaaggagg aaaccaccag gaagaatata aacagganaa 720
 aaagacatgc tcatcatgcc ctgcaaactc ctatgaactg ggaactacag cagctgttct 780
 gccaaaggac aaggttcttc tcnaaagntc aagctccctg gaggganaaa gncctgantt 840
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<210> 4327

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4327

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ataagtccaa tgatgcaagg atttggacct tggnaattca agttttattct ccgcagatac 720
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<210> 4328

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4328

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<210> 4329

<211> 336

<212> DNA

<213> Homo sapiens

<400> 4329

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cctcgccccg ttcattgactt aatgcctcct agaagaaaag gctaaaaaca agacacacag 240
aacaagaaat tgcactctct caaaacgaca gtcnccctga aacggacgct ggaagagggt 300
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<210> 4330

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4330

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tggggcaagt ttgtgccatn caacaatgtc tgcaagcaag gaatccctca agggatttgc 720
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<210> 4331

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4331

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tcgacgaggt anactcgggg gaccagcctc ctgcaacatc cgtgccagct ccccgagcaa   540
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<210> 4332

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4332

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tcaacagtag ttccttagtt tccccacccc aacgtatttc ttctactgtc aaaacccaca 300
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 aatcaaattt cacaccttgc acaacatcaa aggattcata ccggagagaa accttataaa 720
 tgtatgaatg tggaaaggtc ctccatcaaa tttcacaacc ttgcacaaca tcngacaant 780
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<210> 4333

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4333

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<210> 4334

<211> 794

<212> DNA

<213> Homo sapiens

<400> 4334

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ccaagctccg gagaggcgcg gaagcatgac cctcaggtgg taacagaaaa caatccagat  180
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aattggggga ctccaaangc tccttctgag gcaaaaagtt ttgccttga agtacaagac  720
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<210> 4335

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4335

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<210> 4336

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4336

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<210> 4337

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4337

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ccaaccggtt ggccctnggg ncnaacct 748

<210> 4338

<211> 575

<212> DNA

<213> Homo sapiens

<400> 4338

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<210> 4339

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4339

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<210> 4340

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4340

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<210> 4341

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4341

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<210> 4342

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4342

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<210> 4343

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4343

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<210> 4344

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4344

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 ttaattangt cagacatatt aaaggaatat tgcctggcct cccnntttt ccccaaaaag 780
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<210> 4345

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4345

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<210> 4346

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4346

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<210> 4347

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4347

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acaagttgga gtggtgtgat cataaatcac tttgatgtaa agaccatctc atcaagaact 780
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<210> 4348

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4348

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<210> 4349

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4349

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 acacttacca aagaaagaca ttatacagc caacgaacat gtgaagcaaa gcacatcatc 720
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<210> 4350

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4350

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<210> 4351

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4351

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 aatcatgtca gaaagtgaag cagaagtagg ccatgtgtta catgcatggc tggagcagga 360
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 taatcttgta agccggattg gnittcaana cttcaatttt ttcaaggcac ctattgggnc 720
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<210> 4352

<211> 867

<212> DNA

<213> Homo sapiens

<400> 4352

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<210> 4353

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4353

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 aatttgaaga tcgatttgac aaatatcttg atccgtcctt tttcaacat cggattcatt 540
 gggttcaatt tcaactcctt catgatggtg atcttcttgg ngggcttagt ttcaatgatt 600
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<210> 4354

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4354

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gggcaccanc ccatcannct gggaggttta tccaagaaaa ttttcccaa aaaggaaagn 720
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<210> 4355

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4355

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<210> 4356

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4356

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<210> 4357

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4357

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<210> 4358

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4358

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<210> 4359

<211> 821

<212> DNA

<213> Homo sapiens

<400> 4359

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821

<210> 4360

<211> 801

<212> DNA

<213> Homo sapiens

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<210> 4361

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4361

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<210> 4362

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4362

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 ttnaaatgg 729

<210> 4363

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4363

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<210> 4364

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4364

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<210> 4365

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4365

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<210> 4366

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4366

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<210> 4367

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4367

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tacagctgaa ttgggggcac atggacaggt atnatcttaa aatatnanaa antaatttaa 660
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<210> 4368

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4368

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gaaatgttgt catccgtcat accagattcc aggagagaaa atgaacttcc cgatttcccc 180
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nctgcanatt gaaaagggaa cgcttacagg tanagaaaag acagacttcn aattcagaaa 660
gaaaggcact tgcaagtgan tttccaggc ttccatttag caaaatgttt ggaaaaacnc 720
tanatttttc cccaanat 738

<210> 4369

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4369

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gaggaagaaa tcgaagattc agaagcaggg aaagaaaacg gcgggtnaag tctcgttccc 660
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tcgagata

728

<210> 4370

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4370

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aacctcaagn acctctgcat aatgttcaag ttttaaataa aatgataaca tcaaggatca 600
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<210> 4371

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4371

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 a 781

<210> 4372

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4372

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<210> 4373

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4373

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<210> 4374

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4374

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<210> 4375

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4375

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<210> 4376

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4376

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<210> 4377

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4377

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<211> 809

<212> DNA

<213> Homo sapiens

<400> 4378

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 ctatganggt aaaggatgct gctgaagcca ccctaacatg cattatgcag ttgctcgggg 720
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<210> 4379

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4379

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<210> 4380

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4380

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<210> 4381

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4381

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<210> 4382

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4382

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 ccctcacata cacaaactct gttctgtttc aagatacatc caatggagca ccttaccctc 480
 acatgtacaa agaggggcaat gggaacttga tagcatatgg tattgtgaga atcactgagg 540
 caagagcaag caactccttc tggttggtaa ttggaaaatc ctctcttac attgggcaga 600

aatcattttt aacgcctact ccatatcttt aagcgagaag ctgttatctc ctctgcaggc 660
 tctgtcatac tatnggatgt ggcttcattt ctaaacctag caatcctgac atcctcatca 720
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<210> 4383

<211> 574

<212> DNA

<213> Homo sapiens

<400> 4383

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 aatctggcca catacgctaa gagtaaattc caattgtatt gcaaacaat gtattttgcg 180
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 aataactcta tttccaactg aaacactcaa tttcccagggt aaactggtaa ttcccaggag 480
 ctttcanagc attttcagna aacctanntg accagttcct ttatatgaag gataantata 540
 tcatgtgtat atgttcaaag tatagcagct gtgt 574

<210> 4384

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4384

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gccagtgtta ttacgttccc atccgattca cctcagaact catcgcagct gcaaaggaaa 180
gtaaaagaag ataaaagatg tttcacagct aacaaaaata atgttggaga tacctcccgt 240
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gaatgttgtg aaattgaagt aaaaaagcc taagagaana acgatntgaa aaaaccaatg 720
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<210> 4385

<211> 709

<212> DNA

<213> Homo sapiens

<400> 4385

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caggagtat acggccttgg gaaagtcact taactgctct gaaccttaac tttcntatct 480
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ctgcatagtg tccagcacag anggcaccac agagggctca acaaccacat ggggccctct 600
gaaaggactt attcattann aagatgncca ctctgcactt tgggaaggcc gaggcgggtg 660
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<210> 4386

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4386

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tacctcccca attagtttgg catctcctaa agaaattgat catatttaca cacagaaatt 120
aattgacgcc atgaaaccat ttggagtgtt tgaagatgag gaagaattga accacaggct 180
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aggattcctt ggnggggncc cctgggcaat gctaagtcca annaacttgc caattgtatc 780
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<210> 4387

<211> 850

<212> DNA

<213> Homo sapiens

<400> 4387

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<210> 4388

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4388

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aaggtctgtc aggatatgaa gcaacctctg tctcattact ttataaactc atctcataat 180
acatacttaa tagaggatca gttccgaggt ccctccgaca tcacaggata tattcgagct 240
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 tcagcatctg caaancagtt caagttcaaa gaatttcaag gggtcgtttc aagttcaaga 780
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<210> 4389

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4389

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<210> 4390

<211> 848

<212> DNA

<213> Homo sapiens

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agagatgtac aaaagctgac cgaattcact accagtcaac ccacactaca agaaacatca  180
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ggggtctc                                     848
    
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<210> 4391

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4391

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 ggaaataaag gaagagcccc aaatatgcgt tattgagctg ggaaggcaca atggnggaca 720
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<210> 4392

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4392

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ggcatgcagt ttggtcctcc gggaactggc ttccagctgt ttggctatga ggaaaaactg 600
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<210> 4393

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4393

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atgcatgttc caacatttcg tgtccaggac tattgctggg aagatcatgg ttattctttg 180
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<210> 4394

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4394

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ccaagggaca	tggttagaaa	agtttantta	caccagggtg	aagtggntac	ccaatttggg	780
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<210> 4395

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4395

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cccgttatac	tcagtgttgc	tgaaaaagtc	catttttaaaa	taatggcacc	taccacatcc	180
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gttgaaagtg	gagggggtgt	tactactgtt	gtgtctgaaa	caagagttaa	ggttatattt	300

tatgaagcag ttttggcttt ttcaacagat gttggccact cacttttatg gatttcacat 360
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 tattattgga cctccaggc tgtcaatgaa gagagaaaac ctttctttgg aatcaagttg 480
 aaaacctggt gttaacacct ctctctgggc cttctttgct ctccttagca cgttcattgc 540
 taggggctgc cacttccatc ttctctgcct tggaaagcat agagtcgttt ctcaagcctc 600
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 ngcaa 665

<210> 4396

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4396

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 gcggcgctgg cgccggccct gggaccgcg gaagccggca tgctggagaa gctggagttc 180
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 agatactata aatcacctat ggtacagatt tatgaattag aggaacataa aattgaaaca 480
 tggagggagc tttatttaca agaaacattt aagcctttag tgaatatatc tccagatgca 540
 agcctcttcg atgctgtata ctcttgatc aaaaataaaa tccacagatt gcccgttatt 600
 gaccctatca gtgggaatgc actttatata cttaccacaa angagaatcc tcaagttcct 660
 ccaagctttt tangtccgga tatgccaaaa gcctgccttc atgaaagcaa gaacctggat 720
 tganccttgg natna 735

<210> 4397

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4397

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ctgaaaggct cccgggagctc cgagctgcta ggtcaggcag ctcgaaacat ggtactccag 180
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aaccaagga nggtgggang gttnccaatt gnaggccaaa g 701
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<210> 4398

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4398

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ttgagcagct caaaatggca gtcaccaacc taaagagaca ggctaacaag aagagtgagg 180
gcagcctggc ctatgtgaaa ggcggtctca gtacattctt cgaagcacag gatgccctct 240
cagccatcca tcaaaaacta gaagcagatg gaacggaaaa agtagaagga tccatgacgc 300
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 ttttcaagaa atattatgct gaagtanaaa caaggattga agctttaaga gaattacttc 600
 tggataaatt gcttgagaca cccatcaact tttacatgac caaaaaacgt tacataaggg 660
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<210> 4399

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4399

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 gatttgcata cttagagatt aagcccatgt tcattaatta tttagttaat tcaaaagcca 180
 ttaataaatc catgcccagc ctacgcaaca tagtaagacc cagtctctac aaaaatttta 240
 aaaattagcc agccatggtg acacgtacct gtagtcttac acacttggga agctgaagcc 300
 agaggattgc ttgagcccag gaggtcgagg ctgcagtga cgtgattgt gtcactgcac 360
 tccagcctgg gtgagagagc aagaccttgt ctcaataaat aaaccaagt tacttcgatg 420
 actagatact ggaggtctga aggagaagct ttaaaaatac agattgattg cttcagagaa 480
 atcctattta taattatgat ctgaacttat tctatgatta gcaaataat catctgaaaa 540
 taaaacagga gttctctccc cagacttttg tttttcagga tggtaggttt tggctctggga 600
 cccatcatgn acccattttg gtaaaaggaa aaagatagta naacaggga taggaagttt 660
 ccagagattt gggcatctca nggatccatg aaatgctgag actaanccac taaatccaaa 720
 ttttattggc tanggnaaat ccnaaatccg gtcagtgttc cggacaagat tttaggagtt 780
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<210> 4400

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4400

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at t t t c c a c g   c t g t a c c g g c   g g a a a t t c a a   g c a c t g g a a g   a g a g g t t c c g   g g g c t g g g c t   60
g g c c t g a c t g   a a g g c g g c g g   a a t g g a g a c g   c g g a c c g a g g   a c g g g g g c c t   c a c c c g c c g c   120
c c c a c g c t g g   c c t c t t c t t g   g g a t g t t g c a   g g c g g g g c c c   t g a c c c a c a g   c c t c c t c c t c   180
a c c c g g g c c g   g t c t c g g c c c   c g g t g a c t t c   g a c t g g g a g g   a g c t g c t g g c   a c c g c c t g c t   240
c c a g g t c a g g   a t c t g g t g a t   t t t g a a g a g a   a a c c a c a a c g   a c a a a g a t g a   a a a c c c c t g c   300
t t c c t t t a c c   t g a g g t g t g g   c c c t g a t g g a   g g t g a a g a a a   t c g c t t c t a t   t g g c a t t t t a   360
a g t t c a g c a a   g a a a t a t g g a   a g t g t a c t t a   g g a g a g g a g t   a c t g t g g a a c   c a g t a g g g g c   420
a a g a a t g t t t   g t a c t g t c c t   g g a t g a c a g t   g a a c a t g a a a   a g a t c a t t t t   g t a t a a a a a a   480
a a t c t a a a a t   t g g a g t c c t c   c a c a c a t g c t   t g t a a a a t a a   a g t t g c t c t c   c t t t g g c g a a   540
a g g c a a t g t g   t g t t c a t c a g   t a a a g t t g t g   g t a c a c a t g a   g a t c a g t t t t   t g c a a a t t c t   600
t c a a c a a g c t   c t c c t g c t c t   a g g a t n a a g g   a t a g a c c t t g   a c a a g g t c c a   a a c c a t a a t n   660
g g n n t c a a t g   g g g t c a a a g n   t a c

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<210> 4401

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4401

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a c g t c c c c g c   c g g g c c c g c g   c g c c t c g t g c   c t c g c g c c t c   g c g c c t c c a g   c c a c g t c c c c   60
g c c c c g g c t c   c g g c g c g c c g   c g g a g t t g g c   t g c t g g g a g g   t g c g g g a c t g   g g t g t g g c c g   120
g c g g c t c t g g   t c t c g g c t g t   g a g c t g c g c t   c t c c a c g c c g   g c t c c g c g c t   c c a g g g g c t g   180
c t g a g c g c c c   a g c g g a c a c c   g g c a g c g c g c   g g t c g a c g c g   g g c c t g a g c t   c c c t c c a g c t   240

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gttttcactc attagctcct gaggtaaaca aattgaaaaa atgagcgaac tggaacagtt 300
gaggcaagaa gcagaacaac tgcggaatca gattcaggat gctcggaaag catgtaatga 360
tgcaacgctt gttcagatta catcaaataat ggactccgtg ggtcgaatac aaatgcgaac 420
aagacgtaca ctgagggggcc acctagctaa aatctatgct atgcattggg gatacgattc 480
caggctgcta gtcagtgtct ctcaagatgg aaaattaatt atttgggata gctatacaac 540
aaataagatg catgctattc ctttgaggtc ctctgggtg atgacctgtg cttatgctcc 600
ctcctggtaa ntatgttgcc tgtggaaggc ttggcaacat ctgctctata tataacttaa 660
aggaccaana gagggaaaat gntnana 687

<210> 4402

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4402

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gctttcggag tgcggttgct caggggaagc cgtcgcgcc cccgcctcgg ggccgagtga 180
gagtgcccggt cgcgtcgcgc cgcgtcgcgc cccgggccgc ctccctgccg ccagtggcgg 240
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cccgtcgggg cccagcccct actcatggtg cccagaagac ctggctatgg caccatgggc 360
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ctctatgagg tagatattaa accagacaag tgtcctaaga gagtgaacag ggangtggtt 480
gactcaatgg ttcaacattt taaagtaact atatttgagg accgtaagac caatttatga 540
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tagacgttac ttacctggg gaangtgga aaaggattga cctttcaagg gtgtcaatca 660
aatttgtctc ccgggttaag ttgggaacct actgcaanaa ntactganaa ggacggacct 720
tgcctgancc aattngaatt t 741

<210> 4403

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4403

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tcaaaaaaaaa agaagcctct cactttcagt ccaagctaata tacacctcct cctccaccac   180
cctcaccaga aagagtcggt atttcttcaa tagatatatc tcaaagcaga agctggctaa   240
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gttcttcctg tccaagctgt ggtcaaacat gtcacatgag tggtaaactt acaaagtgtg   540
ctgcctgcgt tctgatcacc cctggagact ccaaagctgt gcttcctccc aactgccac   600
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cactagcacc tgtgttgctc agaaaaccca ntctcgctaa agcaacttca agctggacca   720
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<210> 4404

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4404

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tcaccaaagt taccgcacaa tgggtccaca ggttccaccc cactgctgag gaattctcac   60
tccaactctc taatttccga atgcatggat agtgaagctg agaccgtcat gcagctccga   120
aatgagttaa gagacaagga gatgaagctg acggatatcc gcttagaagc tctcagttct   180

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gcccaccagc tggaccagct ccgggaggcc atgaacagga tgcagagtga aatagagaag 240
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 gtggaaggag gattccagac cacacctctt tcttattggc tgcattgggn gttantggca 540
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<210> 4405

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4405

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 tgggaaaact gcacantgaa nttggattgg tgaaaatgna atgtgcgnag tgatgtccgc 780
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<210> 4406

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4406

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agatgtgaaa ttgcaggatg caggggtgta ccgctgcatg atcagctatg gtggtgccga  180
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<210> 4407

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4407

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atctactact tcttccgaga ggacaatcct gacaagaatc ctgaggctcc tctcaatgtg   60

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 aaactgta 728

<210> 4408

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4408

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aggctgagac agtgggaagag tcaaacttgc cctgaagctt cactcancca gtacctgtct 660
cctctgcccc atgtccanca acttaccctt gacccaatcc ttttaaggga actttgccaa 720
agagaaganc aanaatactc tttctttcct caacnctccc ctnccttttt ttgg 774

<210> 4409

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4409

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ggaaggtctg aaaattgaac aagatggacg ggtccaggaa agaggaggag gaagacagca 180
cactcaccaa catttctctt gcagatgaca tagaccattc ctcaagaatt ttgtatccaa 240
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gtggcttcat tgggatattt atgangataa tgtcagatgt agacaaaatt aacacantaa 660
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agagactttt atgattagaa ntgcatanat ttatgaaact taaagatgaa tggttttaat 780
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<210> 4410

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4410

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gaatgtgcta gaagcactct cagaaaagaa gtctgccagg ggaggactag ggtccaaaga 180
gaatctacat ggttggtagg taggcatgaa aaaaggaagg agagagagag agaatatggt 240
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acataactta gggaaaaata aatattattt tcattagcaa acatattaat attttataag 360
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cacaattgag tgtacctggg agtctccttg ccctttctca gaagacatta aaaagaaaag 480
ctgtaaatca gtcataagaa aaagaacata tataatctgg agtagaattt tgcttccact 540
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cacgtccatg aattagatta tttccttgaa gccttttcat caaatatttt gtgggccttt 720
ttttttttta aatttttagcc aatggntaaa tcaaancitt aaggctttaa aaattgtinnt 780
ccacatagct aaaccaangg ttccacca 808

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<210> 4411

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4411

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<210> 4412

<211> 852

<212> DNA

<213> Homo sapiens

<400> 4412

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<210> 4413

<211> 799

<212> DNA

<213> Homo sapiens

<400> 4413

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<210> 4414

<211> 868

<212> DNA

<213> Homo sapiens

<400> 4414

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<210> 4415

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4415

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<210> 4416

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4416

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<210> 4417

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4417

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aaaacttang gattctggc 859

<210> 4418

<211> 925

<212> DNA

<213> Homo sapiens

<400> 4418

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<210> 4419

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4419

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<210> 4420

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4420

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<210> 4421

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4421

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<210> 4422

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4422

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<210> 4423

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4423

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ctgtactgcc cagaggagaa ggagatgaaa ccagcttgta taaaagccct tactcgtata 180
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<210> 4424

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4424

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<210> 4425

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4425

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<210> 4426

<211> 876

<212> DNA

<213> Homo sapiens

<400> 4426

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<210> 4427

<211> 850

<212> DNA

<213> Homo sapiens

<400> 4427

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850

<210> 4428

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4428

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gctcatgcct	gtaatctcaa	cactctgaga	gactgaggca	ggaagatcgc	ttgaggccag	180
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ggctatattt	ttaagattgc	cagcttttca	aatgcagcaa	aataaatgaa	aaaagaactt	360
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ttagtctata	atgaaaatat	ctactttgat	ttcttagagg	tttcttcaaa	taaatatatt	480
gaaacaattt	taaaatgacc	acatattatt	taattttaaa	agcacacttt	taagaacccc	540
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atttttcttc	cccaggaatc	ccctanaccg	gtttgatcca	aangaaagta	atttgggcaa	780
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<210> 4429

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4429

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tgaaaactca aaatgggaac ctgttaaatg ggaaaatgat atgcactgtg ctgttaagat 180
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cagccattca ttatctgaga agtctctgga agtccccctg gaacaggaag attcagtagt 660
tactaactgt attaaaacta actttgacct tgacaagaaa aactgctgac aataatcagt 720
gaacagaaag tggctcctgaa tttcagggag aaaaattcta gaaccaaaga accactagan 780
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aa 842

<210> 4430

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4430

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ccgctcaaac ctccataatg gtctgcacca gccagatttg cctgccctca aaggcattcc 180
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 tacatatattt taacattctc ccagtggttt gcagtttgta gggactcaag taaatatttg 660
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<210> 4431

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4431

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 aatgagtgtg gcaagaccgt tggtaaaaat tcacaccttg taattaaaag gtcaaaattc 180
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 cacgtggcac ccatactag aattcacact ggagagaaac cttacaagtgt caatgagtgt 480
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<210> 4432

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4432

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tataattcaa ggaagaccgc tgcctgctga tctgagggcc aaagtttgga agattgctct  180
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acagaacact attcacaag attgcctgca gtttattgac cagctttcag tgccagagga  300
gaaggcagca gaattacttt tggatattga atctgtaatt accttttatt gtaaatacag  360
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ttgttaaag caaaaggaag ttattttaac ncaagaagtc aagacagcaa agaagaagtt  780
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<210> 4433

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4433

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aaaatttatc acacaaaaaa tgagttttat agaatgcttc aaaaaaagcc attaaaataa  120

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ccaaaactaa aaccaagagt ttgtaggaaa ataccaatat gcaaacattc caaaaggaga 180
gcctttatit tgccagccaa ggtggtatta ttigtittaa aaaaaaatc aatgtaacat 240
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tataatggat caagtaaaga gctgtcaaat aagattaaaa agactcacia ttattggaat 720
gttaaaacia aaccctaaaa ntgaangaaa accgttaaat aaangctaata taaggtaanta 780
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<210> 4434

<211> 232

<212> DNA

<213> Homo sapiens

<400> 4434

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cgcgcgggcc gccctccccg gcgcccgggt cctctccgag cccctgtcgg cgcggaaccc 180
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<210> 4435

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4435

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<210> 4436

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4436

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 aaataaatgt ccaacggctt aaaccancca agtcenatgg gtataatggt tatggcaagc 720
 tcaaaactaaa gacaacccta ataatggagc acagctatgc ccaatatcct gggnttccag 780
 atgccantcc nactataaag aacccaaaag ttccttgaag naaatgggct ggatttcang 840
 ggcaaaggac a 851

<210> 4437

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4437

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 tattaaatat gacccttata caaattaaac aatggttacc gcatttgccc ctnaactcca 660
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<210> 4438

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4438

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<210> 4439

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4439

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<210> 4440

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4440

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<210> 4441

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4441

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tcacgagtac taccttggga atatgttggc caagaaacct tctaattgaa aaagaacgan  660
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<210> 4442

<211> 886

<212> DNA

<213> Homo sapiens

<400> 4442

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gcggctccac ggagctggtg gaagactcgc actattcgca gagccagctg gtgtgctccg  180

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<210> 4443

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4443

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 gaaatggagc aactgcacat cctcaattat gacccgggat gggacancat acaatatggg 720
 gggaactccc tttggggcaa tatgggttcc nccctaanaa gggttaatnc ggggttcctt 780
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<210> 4444

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4444

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 cccattccc ttgggcaagt tgagagtgtt ggttcctggc cttgacctca naaactcatn 660
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<210> 4445

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4445

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<210> 4446

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4446

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gaagaggaac aggggggctt cattgcaaac ctgngcctg tcccctcctt gcctgattca 720
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<210> 4447

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4447

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<210> 4448

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4448

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<210> 4449

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4449

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ctgcaccccc agtgtatcag cacttcttaa attaaaataa tcttgccaac taatgtcttg  180
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ggctccccctt ttaccccata cctctctccc ccaaaaaagc ttggacagca accaaattgg 300
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<210> 4450

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4450

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 aatgccacca aggcattctt gtactgcctt cctctccctc cccaatcnaa gccaaggcaa 660
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<210> 4451

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4451

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gatgccaatc ctaatggatg ggagantttc ctaaggattc caaaaatgnn aacaagtncc  780
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<210> 4452

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4452

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<210> 4453

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4453

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<210> 4454

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4454

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<210> 4455

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4455

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<210> 4456

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4456

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<210> 4457

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4457

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<210> 4458

<211> 860

<212> DNA

<213> Homo sapiens

<400> 4458

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<210> 4459

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4459

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<210> 4460

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4460

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tatacagaat ggattccctt caatagttcc taccctccctc catagacca gtgtcttggc 480
ccactggcta gaaaacaatc tatgttaact ggagacattg tggattgggg acctaaaggc 540
caattagatg gaaaagaaga aaatcagaaa tcgtggcaca aactttgctg gcattggttg 600
caagctttta atgcttcttc tttatataac actggggatt caatcccagt cggncgcccc 660
anattgcttg gcatggagca agcttttagcc cgcctcttcc tcagtggcat tatctaaggg 720
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aannggcaaa natcctgggg tttgccna 808

<210> 4461

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4461

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tgaacggatt cagctctcag gaatgtataa tgtccgtaaa ggcaagatgc agttgccagt 180
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gagtcctaac cttttccaat aatcatttag gggacttccc tctggcantc tgcagtattc 660
caaccctggn aaaagctgaa cgtgtcctgc aatngccctg cgatcaatcc ccgggaancc 720
gtttggangt tgatgcacaa ctttacanga catttttgtt gg 762

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<210> 4462

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4462

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ctgtggcatc ccattgttca tatttgccaa gtcttctgta aagatgtcta ggacgaaata 180

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ttttatgtgc taatgcatgt atttgtaaac cagatttggt taccactcaa aattaacttg 240
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 atcagttcta taaatgtgct cagcagttta acatgtgaat cctgttttaa agtgctcaga 480
 tttcaactgt gtaagccatt gatataacgc tgtaattaaa aatgtttata tgaaataact 540
 taatgtttta aatttattta ttagatcac atcattttta acgtatgcag tgcaaatatg 600
 tgaaaagtct tttggtttan tcccannant tatttanttt aagaaaagta agtttaaaag 660
 accttaagga cattca 676

<210> 4463

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4463

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 ttgttgatg agttaatggg ccgggaccga aacctagccc cggacgagaa gcgcagcaac 180
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 cgatacttac agagcttact tgcagaagta gaacgtagga tcagacgagg ccatgctcgt 420
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 aaagaaagag agaagaactg ctaaggtcca caacgtcgac aattgaaaag ctttgctgca 660
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<210> 4464

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4464

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atatagcaaa tagaagagaa ctaatttgtc tcagatttct taaatgtgaa gccttttctt   60
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ttttgttttc agaaagtgat tactattaat ataaaccaag atttacttgt aaaaagcagt  180
gttctcaggg tttatattat ggaacagtag cttcaaatac tttgtcttat gacagtaatt  240
cacttccttt ctttttcaca gagtaagttc ctctcagttt atacagagtg attttactta  300
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gtgaatatat tttgtaataa acaaatcaag cttataagat tacaggtctt cagaataaga  480
ccatagatac atttgtaaaa gattaataat ttctctaaac taggctattg agaaaattaa  540
tanacataaa agacaaaagc attcagctct tcgaagtata ttaagctgat tagaaaaatc  600
tgaaataggt ggcgccaaga tggccgaata ggaacaagct ccagtctgca nctccanca  660
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<210> 4465

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4465

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attcctgctg tggatcccaa ctttcctaac aaaccacccc ttacatttga cataattagg   60
aagaatgttg aaaataatcg ctaccgtcgg cttgatttat ttcaagagca tatgtttgaa  120
gtattggaac gagcaagaag gatgaatcgg acagattcag aaatatatga agatgcagta  180

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gaacttcagc agttttttat taaaattcgt gatgaactct gcaaaaatgg agagattcct 240
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ctggctacac gaaaatttct agaaaaagaa gtttttaag agtgactatt acaacaaagn 660
tccagttaag aaaattctag gcaagtgtgt gggcatgttt ggcaaaggaa tacnttaagt 720
tatgcccana anacttccgg agatgaggga ggttttggcc cggngaaatc caccgggaat 780
tccggccaaa aaccaan 797

<210> 4466

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4466

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tagtgcaatt tataggtgcc ataatcccta tggactgagt cagaaatggc ctaatagaag 180
gcagaagaga ggccagttcc aagcaggggc atagaacaga acaatctgca agggagttgg 240
gagcatatac cgctgggtta agacagttag tgagaaaagg ctggaaggca gacagtgtctg 300
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aatagtaaat ttttaataagc ccatgaactt gattatggct acctttattt taaacaagga 480
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ttctcttcct tcaaatacaa tangtatgaa aagttagttt cctgcctgga gcctgggatg 600
tcctgctata aaaaaatagc tttttcaagg gatgccgatt caatcatatc ctccaaggtt 660

taagaccgga ttaaaacatt ttnantcctg aaaaagcata anttcccttt gagcaagtt 720
gaaaaaaaaat gangtaattt taaaaattta aattgccaat aaaaatcccc caaa 774

<210> 4467

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4467

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gtcccgagg caggctgcct agactcacag cctcgggacc gttgccacgg cctgtcttct 180
cgttcaggcc tgcctctgac agcactcacc atgaggacat tccatccttc accccctcct 240
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caggtagagc accagcttcc ctgaccgctg ctgctcgggg agggctgggg ctggccgggg 480
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atttttctgc acacggagtn ttngggaata agaaccggg ccaaacgctg ggccctcaac 720
ggtgnagccc tgcccaatcc ttaacgggca aaggtgggnt gggtcctggg aaagaagntc 780
ccccaaggg gggaaancna tgggtttcc 809

<210> 4468

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4468

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 cggccacttt tatgaagtgg acacgtgttg gtccactga aaagaaactc cccacccatg 480
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 tcctggagtc atgggaagtg canccgangt tctatattaa aaatacagag gctaagcaca 660
 tgtgcttggg gaatgcagct acagtagtgg aatgaaagtg ctgtccgttc cttaccccc 720
 cagcttctca actgtcctcc aaacgcatac ccctgggntc ctttttcctt aatnaagggg 780
 actgaaattg aaattggggg cttngcccca agggttcaan nacctggggc cttttcgtaa 840

<210> 4469

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4469

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 gaactggctt gagttggttt gaaatgacca ttcccttctt actaataagc ttatgcagat 180
 tcattcacct ttcttttctc ttttctgttt ttctacagag aaagagaatt gggcttatcc 240
 cgccagaaaa gcacagaagc cacagtgtt cttgttgaaa gacagaccct cataatgtta 300
 cctctagtag aaagatagca tatgcttggt ttgcttggtt gggttcatca tactctattg 360
 cttgggcaga agagcacata tgaagagaag agaaatggga aatggggaag acaacgcaga 420

gcaccatatac ttgggggtgta tatagaagct acaggacaag tgtaatTTTT atcattgcat 480
 ggggagcatt gacataattt ctactgcagc tgagcatttt ttaatatgga taataggatt 540
 ctgcaagtga tacatttggt cagagaactt aataaactaa gtcaagtggg gatangtcct 600
 gtgacagaat tgtgtgatac agggcaaaca ggagttgggt tatgggggaa aatgccaagt 660
 tgaaatatgt tttgatcctt tggngaaacc tttttttca tttaaacctg gtccttaaatt 720
 cccagttatg ttcccagaac aatacaanaa atgtttaaaa tgttccaatt tgtaagaagg 780
 anancaangt natttta 797

<210> 4470

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4470

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 catgtccaca attgcagctt tctatggcgg caagtccatt ctcatcacgg gggccacagg 180
 ctttctgggc aaagtgctaa tggagaagct gtttcgcacc agcccagacc tgaaagtcatt 240
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 tctcagacat gctgtgcaac ttaacgtcac tgccaccgg cagctcttgc ttatggctag 540
 tcagatgcca aagctggaag cttttataca tatctctact gcctattcaa attgtaacct 600
 gaagcacatc gatgaagttt atctatccgt gncctgtggg agccanaaaa nntcattgat 660
 tcccttgagg tgggtanac 679

<210> 4471

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4471

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gttacattaa tacacagctt tttatgggtat acagtaatgt aatatattag cctaattgtgt 120
taggactcct taaacaaggg atactgtaat cattaatata gttgatccat taggcttggc 180
acagtgttta ttttatggaa acactctaaa agaaaaacag acctgaagtt catcatgtgt 240
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aagaatataa aaaggcctag ataacatcat aaaagtaagg ttctagatcc acaaagcaga 540
gaactagacc cagattataa gtcactccag aggtcccatt tttctggatt tgagggaaga 600
agtgtttgat gacaagtatt tgnagtgant ttatatccat tttcttttaa aaagtaatag 660
nttggaatt agntacntgt tta 683

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<210> 4472

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4472

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ttctacatcc catgcttgat aatgccacat caactcagtt gtccaggcca gggacctgggt 120
aatatttgaa gagttctcct tgttcttcag ccagttgtct caagtgccaa ttctacctct 180
caagtgtgta tctaattggt tccttccttg ctactgctac tacttttagcc attgccactc 240
cccatgagat tactgcattg atatgatggg gctctcctgg ttactaatct taaactcctt 300
cagtcaactt cccactact ctctgagtag aaagtctaaa atacagataa tcatgacctc 360

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ccaccatcca ccaccctgaa agtcatttta tgtctcctta tattattgaa cacaatgtct 420
 caattcaacg tcgtanacaa agccatccat aatttgaaca gcatcctttc tctccattct 480
 cccacattta gggttangtcc tggcccacgc taccctttca taagtctacc aacactccac 540
 atcctttcac atccccanag tttgggatgt gctattttaa tttgtcctcc ccaancattt 600
 gtacttcctg gcaaacacac atactttctt ctccaggata actcatattc aattcttgaa 660
 gacttgattc aagttttttc cccccggggg nccttccaaa aaccttcttc cccgggcca 720
 attttgggaa antggnngtt cccccaaaaa n 751

<210> 4473

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4473

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 gaccatggaa aacttgccctg ctctctacac tattttccaa ggagagggtg ctatgggtgac 180
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 gtgggtgaag cttattggcc gagagatgaa aaatgataga ataaaagtat ccctctccat 360
 gaaggttgtc aatcaaggga ctgggaaaga ccttgatccc aacaatgtta tcattgagca 420
 agaagaaagg cggaggcgat ncttccagga ttacactggg caaaaagatt acccttgagg 480
 ctntcttgaa cactanctgc aanaaagtgt ggntgt 516

<210> 4474

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4474

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aaggtctaca tgattacctg aagtttaata ataatgcaag aagtgtttgt gggaagcaga  180
gaagcaagca actgtatttc ttgttctcac ctaagcatta ctggaggata agccacatca  240
gtctacaaag aggttttcat acaaacataa taagatgtaa atggaccaa agtgaagcac  300
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aacttagcac ttctgctccc aagggactta caaaagtga catttgtatg tcccgtatta  420
aaagtacttt gaactctgtt tcaaaggctg tttttggcaa tcaaatgaa atgatttcac  480
gttttagctca atttaagcca agttcccaa ttttaagaaa agtatcggat agtggctggt  540
taaaacagaa aaacatcana caagccatca aatctctgaa aaaatatagt gacaaatcag  600
cagaaaagag tccttttcca gaagagaaaa gtcacattat anacanagaa naagatatag  660
gtaaacgcag tccttttcaa tacacaagtt ctataaccac aaaatttggg gactcaatct  720
actttttatc aaaatcatat taattcacat ttcaaaacgt aaggggaaaa atgtctcaac  780
aaaaagggga aatggnncat tttccngggc aaatcaanan                        820

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<210> 4475

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4475

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aactaaggaa tgtaaattgta tttttccac atttcaaata ttccatggac acctatgttt  180
ttaaagatag ttctcagaaa gacctgtga attttactgg cacaattcct gtgatgtatc  240
agggtaatat atataacata ccaattcgtt tctggatttt ggattctcac cttttcgtc  300
cccctatttg cttcttgaag ccaactgcaa atatgggaat cttagtcgga aaacatgtgg  360
atgtcaagg cagaatatat ttgccctatc tccaaaactg gagccatcct aaatctgtca  420

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ttgntggatt aattaaagaa atgattgcc agtttcaaga ggaacttccc atgtattcnc 480
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 aaggngtttc aagatacaaa ttcaaaagag ctggggcaaa tcatganant aaaccagtca 600
 ataaaattac ngtggttgga gggtgganaa actccggtat tgcctgcaca tttagcaatt 660
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<210> 4476

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4476

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 gaaagttcat cagcttgcta tgaccgtggn cagtttccaa caagggggtt atacctttga 480
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 aannggccaa ctcantggca aagtcaaaat ggaccgggtt aaaaagg 587

<210> 4477

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4477

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 gagtcctcag gaacttacaa tcatggcaga aggggaagca agacatttct tataatggcag 180
 caggacagaa agagagagag tgaaggggga agtgccacac acttccaaac aaccatatct 240
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 tcatgagaac agcaaggagg gagtctgccc ccaagattca atcacctccc agtagacccc 360
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 ccatatcgtg attgttctat aataaagaga tgcccacatg tgtttcatca gggacagtgc 480
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<210> 4478

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4478

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<210> 4479

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4479

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<210> 4480

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4480

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<210> 4481

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4481

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<210> 4482

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4482

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<210> 4483

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4483

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 catttaactt tattaaagca atttgccaac tcagctacag aaatacagaa aatattacta 600
 tctggagaac taccagtcg taagtttate ntcgttgaaa ttgcctaagc agaggattan 660
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<211> 854

<212> DNA

<213> Homo sapiens

<400> 4484

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<210> 4485

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4485

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<210> 4486

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4486

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<210> 4487

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4487

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<210> 4488

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4488

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<210> 4489

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4489

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<210> 4490

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4490

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693

<210> 4491

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4491

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<210> 4492

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4492

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<210> 4493

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4493

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<210> 4494

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4494

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<210> 4495

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4495

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<210> 4496

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4496

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caagagagaa cattctgata tttctcccca aattctaggc angcancgtt aacttggggc 720
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<210> 4497

<211> 355

<212> DNA

<213> Homo sapiens

<400> 4497

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tggcggcaag agcagacgcc cgagccgagc gagaagagcg gcagagcctt atccccctgaa 180
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gtccgggcgc cgcacgctga gccctccgcc cgcgagccgc gctcagctcg ggggtgatta 300
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<210> 4498

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4498

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atggaaatct agaaaagaca attcgaatat atagtggcaa aaagcagaag agtggttgcc 180
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 atgatgaatg acctaancct taatgagcgc cctatgtgcc aagcactgtg ctgaatgctt 600
 tgcagaaaac gaaattcatc cttatcagat angttcctgg aacactggaa aagcactatn 660
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<210> 4499

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4499

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 tatgtttatt tattattatt attttttgag acagagtctc actgtcttgc ccaggctgga 180
 gtgcagtggc ctgaacttag ctcaccgcaa cctccacctc ccgggttcaa gcaattctcc 240
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 gccagccta ccatatcagt ttttaataac ttgaactgaa attattggct tggnaatant 480
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<210> 4500

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4500

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cctgctcctt ggctcagtct ggcgccaccg gcatcacgga actgtacttc ccagagacgt 180
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gtatgctcct ttccaccgt ctttgettca agttcaaact tggatttccg gtatggangg 600
gacnatgatt cctttgcaga atgttgnca aaaaattctt tgaatcactg tttgcnttgt 660
aaaaaaatgc ccaaaatgtt ggattaanat gg 692

<210> 4501

<211> 678

<212> DNA

<213> Homo sapiens

<400> 4501

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ccccagacag tgtggagggg ctgctaaatg ccctcaggtt cactacaaag cacttgaacg 240
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aatacttgtg tatttacata accgtttcct tcttgtcact gaaatatatg gaccttaatt 420
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gtctgaaatg aaacccccctt ctccaaaggc aaaattcgga gactttgatc ttgctactg 540
gagtccttta acaacaccta taacgataaa aaattcctaa ttgtttgtgg tagtatttta 600
attctanatg tgttatctct ccgggaagta tangtttata ggaaacacaa natanttgat 660
ttcccgtgt cngttcag 678

<210> 4502

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4502

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caactgttgt tatgtcagtc gaagacttag ccagctatca agtcatgatc cgctgtggag 180
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tgctattaaa aaggcctggg atgatctcaa gaaatatttg gagcccaggt gtcctcggat 360
ggttttatct ctgaaagagg gtgctcgaga ggaagacctc gatgctgtgg aagcgcagat 420
tggtgcaag cttcctgacg attatcgatg ttcataccga attcacaatg gacagaagtt 480
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gggnttta 788

<210> 4503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 4503

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 tgtactctca gctggaacgg caggcctggg ccagtcttca gagacctgag attaaacttg 240
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 gaattttgaa gagtttaaat agtatgtgca ctgaactgag tatccactg gcacgaaaga 480
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 atcttcgcaa cccaaattat gaaaacggtg attctcccta gtttcaggga ctcatittggg 660
 gtttaattca agttccactg aaaagtaaaa gacatccct gaaatttgaa aagaatgcct 720
 ttgtgggaac ttgggcttaa aattattagg gacaaactgg ggtatnagaa tgaattccta 780
 cacaaagtng cctcctggn aaactttttt gaaaaattgn gcaatgttac gntttttggg 840
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<210> 4504

<211> 411

<212> DNA

<213> Homo sapiens

<400> 4504

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 ggaggtatit ggtgacttgg tacaggtttc tttgttttgt gtggtttgtt gaagatgcaa 120
 tgaccgggat gaatgagtga acagctgggt gaggcagggg atgggcatta tgaagttggg 180
 ggatatattg tagatgaaac agatgaccct aaggaggtaa tgaggggggtg gactaaagaa 240

tgacgaatgg gagaaggga aatattgaat tcattcttagc acaagtatat catcctttga 300
agaataatcc aaaacacatt ccagacatta attgtgaaat tcctgaaaaa tgtgggtgtg 360
cttaacatct cccangctat ggtgcaagca gagatgatan tgttgcttta n 411

<210> 4505

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4505

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cgggagtgca ggcctgagtg ttccttcag catgtcggag ggggagtccc agacagtact 120
tagcagtggc tcagacccaa aggtagaatc ctcatcttca gtccttgcc tgacatcagt 180
gtcacctcct gtgacctcca caacctcagc tgcttcccca gaggaagaag aagaaagtga 240
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acaaccaatc ttcaatccaa gccacaaacg ggactcatca aagaattggg gtcctgttgg 780
gntccctggn caaccaattc aaacaaatca atggtgtaag aacctttttc caagaaagag 840
ccncnaggna aatcc 855

<210> 4506

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4506

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tagggtttaa cattgaaata aaatggatct gccagcaaag ggatggaatg tgggatggta  180
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aaaattctgg gaagaggaga atagtgtttt cttcatttga tgcagatatt tgcacaatgg  300
ttcggcaaaa gcagaacaaa tatccgatac tatttttaac tcaaggaaaa tctgagattt  360
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atgattggat gcctgaacaa ccaaatatat tccaaagtgg gagcaattgg gaacgcctga  660
aancaaggaa ttgcccaaaa gccttaaaga anccgtgttt gggttcccca actggttaan  720
ccgccttttg gtccctcca aacnntttg nggttggggg ggaantcc                    768

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<210> 4507

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4507

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tggagggact cagaggtctc atggttcaaa gattcaggtg gttctgagac atgatctggt  180
tattctcttc tatccatta tcgctttaac tttattgtat ttttactttt tggaaatgag  240
aatagtgggt ctttgttact ggacccgtga ctttaaaaaa ggaagtctt tttatttatt  300
attattatta ttaattcaa tcctccaaga catcagaaaa aagagggagt tcttgaatat  360

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cttttggcctt agttattatt tgatttcata tatcatctca gatttaccta aacttggata 420
aatgtaattc atatacttat ttgataaaaa tgtcntttaa aaaattttta ttcaccaaac 480
tacttcagga aataaaatgt ttccttaaga aaaaatatgt ttagtaatgc gttttcncct 540
gaaaataaca gggtaaaaaa gntcncctta atggatgcca gggtaataag gcaagtttaa 600
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<210> 4508

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4508

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antgattttt gatacccaaa atgggagtac aagatttttt ttgnnaaat ccctggcaa 779

<210> 4509

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4509

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cacgaagccc tcagcattat tgtggatgaa tataaggcac tactgcagtc ttcagttaag  180
caacaagtag aagctattga aaaacagtac atttctgcaa ttgagaaaca ggcacacaag  240
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caggaaactg ttaaggcagc aataatagaa gagcagaaac gaagtgaaaa ggctgtggaa  660
gangcaatga aaaagaacaa gagatgaatt tgatagagta tataaaagaa cagaaaaggc  720
tcgattaagt catcccgcc aagaagcctg tccagtttgg aactggtcct ccccngtgc  780
acagnaaaca gttaagtgcc tttaatagcc tacggganca anttgacatt ggantaaaaa  840

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<210> 4510

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4510

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gtccgcgcgg ctgctgcgag cggatgatcat gggggccccc ggctcgggca agggcaccgt  180
gtcgtcgcgc atcactacac acttcgagct gaagcacctc tccagcgggg acctgctccg  240
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gaaactcatc ccagatgatg tcatgactcg gctggccctt catgagctga aaaatctcac 360
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<210> 4511

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4511

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<210> 4512

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4512

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<210> 4513

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4513

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<210> 4514

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4514

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 aaacgacagc cacctctgca cctgccgctg gcagaccccg aagtggtagc tcggccccgc 420
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 cgggcgggac ttcctgccct gtgggcggga tttcctgtcc ggggccaaga ctacgaccac 540
 gtgacgggca gtgacagcna ggacnaggac naggaggtcg gcgagccgag ggtcaccggt 600
 gacttcgaaa gacgacttcg atgcgccctt caaacggca acctgaatct caaagacttt 660

ganggccctc atcctgggat ctgggagaan agaagctctc caaagcaaat tcaaanttgt 720
gcctccngaa gccaaagattg aaccgggggt ggggaacccc cggggttang taaaggggac 780
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<210> 4515

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4515

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ggagtgaagg agcgggagtg gcagatggag tctctcattc gttacatcaa ggtgatcggt 180
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aacacccaag tgtgaggaca tgctctgctt ctgaggagga ggctacctca acatcaaagc 480
cagcaccttc cctgtgcacc ggcagaagct gcagggcttt gtggtcggct acaatggctc 540
caagatcttc tgcctccatg tcttctccat ttctgccgtg ggangtgccg cantccgctc 600
ccatgtacca anttacctgg ataagaaact gttcaagggn aancc 645

<210> 4516

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4516

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aagcccccg ggctaaaaatg gaagcacctg cgggatacag tggagctaca acttctgaag 120
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 atggaaggca gcgaagagaa ggagctgacc ctcacagcca ccagcgtacc ctctttcatc 240
 aaccatccac tggatatgtg accagcattc gcccatctca aggttggcgt gggacatcgg 300
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 gctacagatg acttccgtga ggacgggagg ctggtagaga agacaaccta tgaccacgtg 480
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 gtgatgtact ccaacctcga cctgaaagac ccanggaggc ctatgaagat ggccgttgaa 600
 gaggcctgat ncggcccaat gaacaaagtc ccccgatgct gataactggg naatcccgat 660
 gcctctactt tgcaactccg ggaaattcct cttaaaaggg tgcaattgca atggcattga 720
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<210> 4517

<211> 916

<212> DNA

<213> Homo sapiens

<400> 4517

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 ctaagtgcctt ttagtaggta gcaatcaaat ggtgtaaata aggatgttct tttcctgttc 180
 cttttatttt tttctctctt tattattctt ttattgacac cactagatag ctggccactg 240
 gtcatgcat tgcgaagatg aagaaaaagc aaactacact ttggcctctg gttctgaatt 300
 gcagaaatca aaggatgcag taggtgtcta tgtcagaatt atggatcaga ggcagacaat 360
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 gnctgtttgt ccaagggtt gcaaaggaca agcaagagtt canagagctc aaggatagaa 540
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gaantttttc ttaaatacaaa ccccttgggg tgggattaaa tacaaggga acaaccaaaa 660
 cctttgtggt accgtaatga aaaagtccaa tggttgttta aancaanttt angaatttaa 720
 aggagggttt taaagtccag aagggggaatn aatctgggaa gggcccgggc ttttgggtggc 780
 aaagcctttt taacaagccc ttcctgcaan ntgggtcccct taacccttgg gccttgttac 840
 aattggggggg aaaangggcc taatgggtttt taaaacaaaa gntggctttt aaaaagggcc 900
 ctctgaaaa agtttt 916

<210> 4518

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4518

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 cccttggatt tcacttgcac tgtgcaataa gcaaagaagg gttgataaaa gttcttgatc 180
 aaaaagttca aagaaaccag aatttttagac agcaagctaa ataaatattg taaaattgca 240
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 atattgctca atatttttca tctattaaat taatttctag tgtaaataag tagcttctat 360
 atctgtctta gtctattata attgtaagga gtaaaattaa atgaatagtc tgcaggatata 420
 aatttgaaca atgcatagat gatcgaaaat tacggaaaat catagggcag agagggtgtga 480
 agattcatca ttatgtgaaa tttggatctt tctcaaatcc ttgctgaaat ttaggatggc 540
 tctcactgtt tttccgtgct gatagtaccc tttccaaggt gaccttcagg gggattaaacc 600
 ttcctagctc aagcaatgag nctaaaagga gccttatgca tgatcttccc acatatcaaa 660
 attaactaaa agggcactgg aagtttggca atttttcctg ccctgctcct gccnaaganc 720
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<210> 4519

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4519

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agcaccatga gaatacaata gaatggtaga gtgactgact taagctaata ataacattct 180
aagattaatt gaaacataaa tgacccccag aacaaatata tgagtgacaa aaattctggt 240
ctttaaaaat gttatctata gttagataaa gtttggggca gtggaggcta tcttaaaatt 300
aatcatccaa tgaatatcag caatggattt acagttttcc ctctgacttt ctaggttgtc 360
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taaactagaa ggggtgctaga tatatgttca gtgatgatta gaatcttaac attaaacaat 480
tattgtttaa aagcaataaa tctgggctat attctgtcca tggctcatat gtatttaaaa 540
agaatggaaa gaattttgag agtaaatttt ttgaatgtta ttttcctttt aaattggnaa 600
cttaaattgg gttatcctta aagacatggg tggggaacca ctggnanang gaaatcnaat 660
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<210> 4520

<211> 208

<212> DNA

<213> Homo sapiens

<400> 4520

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agtgcgtgag tttggtggcg gccggctgtg cagagacgcc atgtaccggc tcctgtcagc 60
agtgactgcc cgggctgccg cccccggggg cttggcctca agctgcggac gacgcgggggt 120
ccatcagcgc gccgggctgc cgcctctcgg ncacggctgg gtcgggggcc tcgggctggg 180
gctgaggctg gcgctctang tnaaactg 208

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<210> 4521

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4521

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agatttaccc atatatttat cattttttgg tatctcttct atacctccaa acttccattt   60
ggaataattt accttctgcc tgaaaggact ttgtcatttc ttttaataaa ggtctgctga  120
taagaaattc attcaagttt ttgtctactt ggaagtattt atttcatgat cactcttaaa  180
ggatattttg actgggtgta taactctagc ctgttaatta ttttttcaa gcactacaac  240
gatctcattt ccattgggtat ctgttttccc atgtttctgt tgagtagttg gctgtcaaac  300
taacaaatgg tcatttaaag ttaatctacc acttttcctt tggctgctct tgatatttct  360
ccttgtcttt ggtttttgca gttttatfff ttgttgactt ttttttttaa tcttgcttgg  420
gttctgcagg acttcttaga tctgtattga tngtctgtat cattttggga aatatctcaa  480
ccattatctc tttaaatata atttttgcct atctctcttc ttttgttgag gaccccaact  540
tcccatatga tgaaatttct cacaattcna atttcngta tcncttggct gccctaagcc  600
tgggggttgcc tgggaaagca a                                     621

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<210> 4522

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4522

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ggagaacttc cccaacctag caagacaggc caatattcaa atcagtaa atacagagaaca   60
ccacaaagat actcctcgag aagagcaacc ccaagacaca taatcatcag attcaccaag  120
gatgaaatga agaaaaaaat gttaagggca gccagagaga aaggctcggtt tactcacaaa  180
gggaagccca ttaaactaat agcagatttg tctgctgaaa ccctacaagc cagaatagag  240
tggggggcca atatttaaca ttcttaaaga aaagaatttt cagcccagaa tttcatatcc  300
agccaaacta agcttcatta gcaaagaaga aataaaatcc tgagagacaa gcaaattgctg  360

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agcgattttg tcactaccag gcctgcctta caagagctcc agaaggcagc actaaacaca 420
 taaaggaaaa accagtacca agccactgca aaaacataac aaactataaa gaccaccgac 480
 actatgaaga aactgcatca actaacaggc aaaataacca actagcatca taatgacagg 540
 atcagattaa cacataacaa tattaacctt aaatgcaaac gggctaaatg ccacaattaa 600
 aagacacaga ctggcaaatt ggatagagtc aaaatccatc attgtgctgt attcaggaga 660
 cccatctcac ggtgcaaaga cacacatagg gctcaaaata aagggatgga gggaatatatt 720
 accaagcaaa atgggaaagg gaaaggaaaa aaaagcaagg gggttgcaat cctaaggtct 780
 cctcattana gcaggacctt ttaaaacca aacaaanngg nttaaaan 828

<210> 4523

<211> 575

<212> DNA

<213> Homo sapiens

<400> 4523

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 aatcaccttg ctgaggaagc ttttcgtctg ctgattcttc tttgtgacat cggggaataa 120
 ggatttattt ctaacagtct tgggggctcg tctgggatca cccagtctcc ttcgggtcgg 180
 ggtctctgat tcccgcctcc ccaccaaggg gaggcgcccc actgccttac tgcggtggcc 240
 tcagggactg ggaatccgga cttacctgtt gtgatgaata aaccgagacc ctcagcaacg 300
 tggaaaacgg cgaataggct tgcattgcac tgcctcgggg accaagataa actctgttca 360
 cagagcaaag taaagaaacg tcccaagggt gcgacaaagt acttgcttgg tggctcnggat 420
 attctggagg ttaaaagtgt gtgtgaatag tcacaagcct cactgcagct gggtgttgct 480
 tngntaaatc atgntaaagt cctactgctg ggacccgagc cgaagtgagt cctgcctgcg 540
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<210> 4524

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4524

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aatttctata tagtgtcaag atgctacata atgggataaa gaattatagt taagtgggtg   120
aatctcattg tgctttttgt actgtgtagc ataataccaa attcctctat tcactaaata   180
aacatttgtt gaatactgtc ctaaaacagc ctgttgaagg atacaaaagg atatctagaa   240
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aaatagccac agtagtatag agccaagagg taagcacaga tcaaacatat ttaagggcta   360
tctaaaaata ataaggaatt tggacatttt tctgtaggca acagagcagg cttttcactt   420
aggatgctgt cattgaagaa tttggccatg atcaaagtag ccctttatgt agttaaatgg   480
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gatggacaaa ggcaggggac cagattctgt attatcctgg aaggactgtg ggaatgtgtc   600
aaaggagaac cgaatttgaa cactgacctt gtcattaact anctgcatgg cttgagccnt   660
atcacctgtc agggatttca agcttcccct atttgcaaaa tgggaagtan naaggctgtt   720
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<210> 4525

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4525

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tctaaatagt ttcaataatc ctccaagaca atatcagaaa ataatgaaaa ggctcattaa   120
aagatatgta ctgcaggccc agatagataa ggagagtgat gaagtgaacg aagggggaact   180
gaaggaaatt aagcaggaca tctcaagtct ccgctatgaa ctccttgaag aaaaatctca   240
aaatacagaa gacctagcag aacttattag agaacttggg gagaaattat ccatggaacc   300
aatcaagag gaaaccaata gataatgcga agacttcctt agaaattcat atttatttgt   360

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ccacttgaag ccatattatt ttctgattta ttttcttaag tgccaatggg cccacctttt 420
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 tttttggtga ttaaactcca ttgttcaagg taaaggctgt agataatgag ggaaaattat 540
 gccagttgt ttggtgcttg ttttaaaaac tggctttctt ggatataact aactcctgtg 600
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 ttgaccacg tttacctccc ccatggcggg ttttttcctt ccngaagggtt ttattttcaa 720
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<210> 4526

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4526

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 cctcttgcat gtcaaaatac tatgtacata ccacataaac actagggtat ctgttaaata 180
 tattttatgt tgataccgtt tttacttggc aaagttggat gcacaaagaa tagtagtctc 240
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 gtttaggatt tggatttttt tttgatgttt tggctttttt ggatagttgc taaagttctt 360
 cactatttta cctaggctat ccttataaat aaataccatg aatttttaaa accacacagg 420
 tcaactaaag gtcccnctt cctggggggg acccanggcg ttaaaatgaa atttggggag 480
 ntatcctaga ggtangtaat cccctccaag gtggtantcc ggtcctttaa cctccctgaa 540
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<210> 4527

<211> 418

<212> DNA

<213> Homo sapiens

<400> 4527

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 gcctcttgcc gccgcagcag cagcagtacc ggcatcctcg gctcgcgctc gctaccttcg 180
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<210> 4528

<211> 590

<212> DNA

<213> Homo sapiens

<400> 4528

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 gaatttaggt ctgaaggctt aattagattt aagttaaact tttttttttt tcttccccaa 180
 gaataattta tacaggatgc tgtttcatac tgcttaaaag cacatgacaa atgttagact 240
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 accacttgaa gtcaggaatt cgagaccagc ctggctcaca atgatgaaac tccatctcta 480
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<210> 4529

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4529

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tctaccatag ggttctacag cgagtcgggc atgcctacca aacatctttc agacagtgtg  180
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gtgggaaaga agcaaactg tccctactgc aaagagaagg tagacctcaa gaggatgttc  360
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ttgggtagcc tggcagcctg tcatcattgg tgtagtccaa ggcatcaact acatcctggg  480
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gcactctcct ccctgcccac aaaagacctc ctgggtggga aagactcaaa ggggcncttg  600
ggccactcaa ggacccccctc cgggctgttt tcnggacctg gggggaaggg gatatgatgg  660
ganaaccang ccanttgggg ggctggtcaa                                     690
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<210> 4530

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4530

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agcggcacgc cacagcagag gaggtggagg aagaagagag ggaccggatc ccaggccccg  180
tttgcaaggg aaagtggaaa aataaggaac ggattctcat cttttcttcc agaggaataa  240
attttagaac aagacattta atgcaggact tgagaatgtt gatgcctcat tctaaagcag  300
atactaaaat ggatcgtaag gataagctat ttgtgattaa cgaggtttgt gaaatgaaga  360
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actgtaataa atgcatctat tttgaagcta agaaaaaaca ggatctctat atgtggtaag 420
agaatgtatt aagattttgg ttaaactcat ttaagtggat ttgttcnttg naccttttat 480
gttatagact cctaagtgtt catgttaang gttgagaatg aagcaaactt ttggnnttca 540
cnaaacttg 549

<210> 4531

<211> 619

<212> DNA

<213> Homo sapiens

<400> 4531

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tgcacccaaa gtctttttatt tactttttta actacagcca cactttgagc aggtatggaa 180
cacaatcatt gattaatcta atatatacaa tagggagaac cgtaactaca gatttacaga 240
ttgtggagct gcagcagttt ttcagtaaca tgttggagga acaccagagg atcagagttc 300
atgccaaactt acagacaata aagaatgaaa atctgaaaaa caagaagcta agtgccagga 360
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tattaaaatg tagtttgntc acaagttttg ncctccaata ctttgtgagt ccgggaaacc 480
acacatttta tttggatttc aagtcacatt tattactcag agtgccaatc ctncanaat 540
gtcatgtttg gncctgaagg tgggtgantg ctgacaattt tgccaatgct gctgtatttc 600
tgggaaagat gtcacntca 619

<210> 4532

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4532

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 ggtagctcca aaaacctcgg tggaaagtca tcaggcagac gccaaaggcat taagaaaatg 180
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 ccaggtgccc atgtgagttg ctccgttgct gcccccttt ttccttttct aggttgacct 300
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 gcattgtgct gattcccatg cctacacgat ctcatcttct ccttaccaca tccctgtaag 420
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 aatattattt tagtcttggg gaaactaaat ttcaatttat taagtttttc attattcnaa 660
 gacttcttcc tttgtataaa ctacttgca anatgggntg aaaanatanc ttgaaatttt 720
 aatgaaaata gaaattcaag tg 742

<210> 4533

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4533

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 gaataaaaac aggggtggagg ggacaggaat ggatttttga caaatttaac tttggtatca 180
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 aagtattaat ctgaaagtat taatgtntaa tacaggatga aacaaataag taactggtaa 420
 tgtcatggga ancaagattt tcagcaaaga aagntaaaat attaattgta ngggtttgca 480
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<210> 4534

<211> 368

<212> DNA

<213> Homo sapiens

<400> 4534

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ctctggatcc cgccggctcc ccaaggctga aggagacaag tctggatccg caggagcccc 180
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ggcgantg 368
    
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<210> 4535

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4535

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aacccgctgc agaggcgctcg gatgaggccg anaggcgcg ccggtggctgc cacctgcagt 540
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 gccgcctcac gcacctgctt gggccccgac tggctgctan aacgtgtcca actccgtggc 660
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<210> 4536

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4536

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 agaagatccc cgaactacgg cgacgaggcc tgcctgtggc tcgcgttgct gatgccatcc 180
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 cagatatgtc agctttgtct ttaaaaggtg atcaagctct ccttggaggc attttttatt 420
 ttttgaacat ttttagccat ggcgagctac ctctcattg tgaacagcgc ttcctccctt 480
 gtgaaattgg ctgtgttaag tattctctcc aagaaggtat tatggcagat ttccacagtt 540
 ttataaatcc tgggtgaaat tccacgatga tttcgatttc attgtcaggc tgcaagtgat 600
 tctagtcaca agattcctat ttcaaatttt gaacgtgggc ataaccaaag caactgtgtt 660
 acaaaacctt tanagattta ntcattccaa ccaanggaac tnggncacct atccactgga 720
 agtctgatga ta 732

<210> 4537

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4537

aaaaattact atgaagtact tggagttacg aaagatgctg gtgatgaaga tttgaaaaaa 60
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 gatgctttta aaaagattgg aaatgcttat gctgttttaa gtaatccaga aaagcgaaaa 180
 cagtatgacc tcacgggcaa tgaagaacaa gcatgtaacc accaaaacaa tggcagattt 240
 aatttccatt gaggttgtga agctgatata actccagaag acttgtttaa tataattttt 300
 gggggtggat ttcttccagg tagtgtacat tctttttcaa atggaagagc tggttatagc 360
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 cagttgatgg tctctaattc tccttattcc ttatatccca gatctggaac tgggcaaaact 540
 attaaaatgc aaacagaaaa cttgggtgtt gtttattatg tcaacaagga cttcaaaaat 600
 gaatataaag gaatgttatt acaaaaggta naaaagaagt gtgggaggaa gattatgtga 660
 ctaatatcgc aaataactgc tggaaaagaa aggcaacaan nnacagatat gcagtatgca 720
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<210> 4538

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4538

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 ctaaaggcag cccaggtctg gctaaagcgg ttcttggtat ggaaacctag gcccgcgagt 180
 gcccgggccc agcccggcct agttcaggaa gcggctcagc cccagggcag cacatcagag 240
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 atcaccttct tgaaggttct tctctggttg gtcctgctgg gactgtttgt ggaactggaa 360
 tttggcctgg catattttgt cctgtccttg ttctattgga tgtacgtcgg gacacgaggc 420

cctgaagaga agaaagaggg agagaagagc gcctactctg tgttcaatcc aggctgtgaa 480
gccatccagg gcaccctgac tgcagagcag ttggagcgcg agttacagtt gagaccctg 540
gcagggagat angaccanc tgtgctgtca tgcagctaac ctctgatgtg gtcttcctca 600
acattggnta tggattttgn tttcaagtgt atangactaa aggca 645

<210> 4539

<211> 507

<212> DNA

<213> Homo sapiens

<400> 4539

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gcggtgggca aggagggaac tcgagagcag cctccatggg cacacaggag ggctggtgcc 180
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atgaccacc tattatcttt gnggcctcan tggacctgtc canattcccc angccgaggc 480
cttgctccat gctgactgca ntgggaa 507

<210> 4540

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4540

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agataagatg gcctgggaaa ccttttctga ggacatggct tttgaatgga ggctagaaag 120

atgagagaga cccagccata gaatgatttc agttaagagt attctatgaa gaaagagcag 180
 caaatgctaa ttcctaagg tagatataag gttggcatgt tggaaagaca gaatgggttt 240
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 aggtttaata gtgagacaag accaagaact acatgccagc tccattgttc aatttctgtg 420
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 ggaaagaatc taagaagcta ttgcactggc ccattcaaac attggttaga gttgcatgtc 660
 ctgctgtgaa aagagagatg gcagagacct gtgcaagaaa ccnttgtaag acagatnagc 720
 aggaanctcc tgctnccatg ganggtcaaa ggggtcaaatg tgtaagcag ttaa 774

<210> 4541

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4541

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 aaaaaggaca tcccagtcct ggtggccaca gatgttgcag cccgtggctt ggacattcct 180
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 gacagcaatt ttgctgggtga cctgggtccg aacttgnag gagccaatca acacgtttct 360
 aaggaactcc tagatctggc aatgcagaat gcctggtttc ggaaatctcg attcaaagga 420
 gggaaaggaa aaaagctgaa catttggtgga ggaggcctan gctacangga gcggncctggc 480
 ctgggctctg agaacatgga tcgaggaaat aacaatgtaa tgagcaatta tgaggcctac 540
 aagccttcca caggagctat gggagatcga ctaacggcaa tgaaagcagc tttccaagtc 600
 acagtacaag agtcactttg ttgcagccaa gtttaagtaa tcagaaggct gggaaattct 660

gctgctgggg caagttgggg tgggactagt gcaggagct ttgaattctg tttccaanta 720
aactcaagca naacaggggc cantannagt 750

<210> 4542

<211> 608

<212> DNA

<213> Homo sapiens

<400> 4542

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ggaagcggcc gggctggatc aggatgagag atcatcttca gacaccaacg aaagtgaat 120
aaagtcaaat gaagagccac tcctaagaaa gatttctcgc cggtttgtca tctttccaat 180
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gagatcccaa gaaaaggga tttttattta atgcaattga aaccatgccc tatgttaaga 540
aaaaagcana ttgggccttg cgatggatan cangatagaa aatctacttt tgggggaaag 600
agtgggtgg 608

<210> 4543

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4543

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acctcctata atattgaaac agattctgtg ccctttaag gagataataa ctaacatctg 120

gggagcgctt tacaatttag aaaaggcctt tcacacacag gcctgtttca tcttcacaac 180
aatcttataa aacagatata ttgttcccat ttcccaaata atgaaacgga agcgccgaaa 240
atatctccta tagggctctt caaactgtgg tcaacttagt aaatgatgtt gacagtggaa 300
gtgtgatcat tttattttcc tgcctttgga attgaagatt gtaattttgc aaaaattttg 360
ttgaagatga tgtacctttg ggtcaganan ctggagtaca atggnaccat ctca 414

<210> 4544

<211> 553

<212> DNA

<213> Homo sapiens

<400> 4544

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gcatcagact ttttccaaga gactttcaat tccagcagat acatggccac aagagctcta 180
cagggtgtct tggccatggc gccctgggtg tgcaactcct ctccttcagc ctcttggctg 240
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agctganccc ggt 553

<210> 4545

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4545

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 tacaccgaag atgatttcta ctgccccgtc tgtcaggagg tgctcaaaac gcccgtgcgg 180
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 tgtaacngtg aaaagagaat ccctggttgg aacnttaacc tttttggtaa tnataaattt 840
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<210> 4546

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4546

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 ttctttcccg tcanaaaagg gatcccttgc ggacangacc taaagttgag taactgggtt 660
 cccctanttt tgtccttccg gggcctgggg tgtccccggg ggctcaaggg tgancgggga 720
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<210> 4547

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4547

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 cgtcttcgat acatcaaaca gctgggaagt gggtactaag tttttccaag gaagcttcac 660
 acaatcgant tgagcatant ccnagggttg gggtatccta acaaggatgt ccaattcaag 720
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<210> 4548

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4548

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catggaggat ccctccgagc ccgaccggtt ggcgctccgcg gacggcggga gcccggagga  180
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<210> 4549

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4549

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aggaactgac ttctgttgag cactcaacac gccacagaga ccagccatct tgcaacctca  180
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 ccaattgcat ttaanttttg gcaaggggca actccctgta naattcaaag ggcctggcat 780
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<210> 4550

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4550

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 aagtgggtgct gcaaaaccgt catgaangga caccctgcaa gcctgtnaaa nggaaggccc 720

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aag 783

<210> 4551

<211> 534

<212> DNA

<213> Homo sapiens

<400> 4551

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tacctcaac tacctcttct cactgtcagt gacaccatct tggaatacct ttgggaagca 180
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<210> 4552

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4552

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<210> 4553

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4553

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<210> 4554

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4554

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<210> 4555

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4555

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gatcctgccc ctaagactgc tgaccttgta gctattggag cagaatatga aggcacagta 180
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<210> 4556

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4556

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<210> 4557

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4557

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<210> 4558

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4558

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<210> 4559

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4559

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<210> 4560

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4560

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<210> 4561

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4561

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 gaataacaca agaataacgg ngctanaagc ttccgggatt anttgtccaa ttccagttaa 660
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<210> 4562

<211> 682

<212> DNA

<213> Homo sapiens

<400> 4562

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 ccagtaatga tgaancaact ttatgaactc tccccatctc cggncataaga gattagccat 600
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<210> 4563

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4563

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 tccaagtgcc ggggaaaggg ttactgtact gcaatactgg naanccanct gctgaccttg 480
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<210> 4564

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4564

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<210> 4565

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4565

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<210> 4566

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4566

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 ataattttga agataaaaaac atcaanatat aaaagcaagt gctcccgggt gggactgtac 720
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<210> 4567

<211> 531

<212> DNA

<213> Homo sapiens

<400> 4567

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<210> 4568

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4568

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tttacaaggg

490

<210> 4569

<211> 546

<212> DNA

<213> Homo sapiens

<400> 4569

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gcaatagtac	cccgggggtg	tggggcctca	aatactgctt	gccntgctcc	gctaaccagc	480
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<210> 4570

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4570

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<210> 4571

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4571

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801

<210> 4572

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4572

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<210> 4573

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4573

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<210> 4574

<211> 422

<212> DNA

<213> Homo sapiens

<400> 4574

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ca 422

<210> 4575

<211> 513

<212> DNA

<213> Homo sapiens

<400> 4575

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<210> 4576

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4576

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cactaactgc ncttatagaa attatgatat tcaagtaaaa taatgaaaat aaagcacttt 600
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<210> 4577

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4577

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<210> 4578

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4578

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<210> 4579

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4579

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<210> 4580

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4580

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ga 662

<210> 4581

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4581

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<210> 4582

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4582

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<210> 4583

<211> 805

<212> DNA

<213> Homo sapiens

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<210> 4584

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4584

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<210> 4585

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4585

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<210> 4586

<211> 902

<212> DNA

<213> Homo sapiens

<400> 4586

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<210> 4587

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4587

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<210> 4588

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4588

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 tacangttct tttccggtgt cacttttgta agtagcaact ataaacataa gttaactgtt 660
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<210> 4589

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4589

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 ttgaagaaaa gaacagtaag aaaccagaaa gtagtatttt gggggcagct cacgtggagt 180
 caggctcagt gtaggacttg agtgaaagac tttccaaga agccccaggg ctaatctggg 240
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 ttcactttaa tcagtttgct ttcagaacat aaactgcatt ctaaaccctg ttattttggt 660
 cctaataatta acanccccna aagagaagtt agatgtttat atngaangcc agggaagttg 720
 gtaaagtgat attatccngt gggattta 748

<210> 4590

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4590

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 gccaaagctgg gccttctctg gatcaggcgt cccctgaagt cggcacgccc ctctgcgtcc 180
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 ttccttggag aaacagcaca aacatgacct cctgactgag ccagacctgg gggtcaccat 480
 cgatctcatc aatcctgaca cctaccgcat cgaccccaat gttcttctag atncaagctg 540
 atgagaaact tttggnanaa gagattcaag cccccaccaa gctccaagag attccancaa 600
 ncacgc 606

<210> 4591

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4591

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<210> 4592

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4592

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 tgtatcttgc acaagacttt tttgatagat ttatgttgac acaaaaggat ataaataaaa 180
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 tcttaaggat ggaactcatt atattaaagg ctttaaaatg ggaactttgt cctgtaacaa 360
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 ttctacctca gtattctcag gaaacattca ttcaaatagc tcagctttta gatctgtgta 480
 ttctagccat tgattcatta gagttccagt acagaatact gactgctgct gccttggtgcc 540
 attttacctc cattgaagtg gttaagaaag cctcaggttt ggantgggac agtatttcag 600

aatgtgtana ttggatggta ccttttgtca atgtagtaaa aagtncctagt ccagtgaagc 660
tgaagacttt taagaagant cctatggnag acagn 695

<210> 4593

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4593

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tctctccaag ctgacacccc aaagagccaa agccttggca cctgggtccc tcaggaccgc 180
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agcgcaccct ggttctgaac catctcttca nggntaaaga tttcctgaag gaancctcan 660
tccaacaagn tcagtaa 677

<210> 4594

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4594

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 cactggtaaa acagctgcct ttgtcttagc catgctcagc cgagtggngc catcagacag 600
 ataccccaaa tgtctgtgcc tctcccaaaa catatgaagc tggngcntca aacaaggaaa 660
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<210> 4595

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4595

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 gtttccattt cccatgtaat ttttaagttaa gctaaagttt taaagtggca gttttctgtc 180
 gatgactttt tcaagtgtca acactgtctc ttttgtgaaa atctggaaaa gtgctcatat 240
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ttcanattac aattaaaaac ctcatTTTTT ttttccattt ttgnacctaa cagtgggtgaa 720
tactttacgt tgggnatcc 739

<210> 4596

<211> 229

<212> DNA

<213> Homo sapiens

<400> 4596

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tcccccttct ctccctgccc ctcccccttc tccccctca ccgcccagcg gggcttctaa 120
ctgacagttg tcgccgggcc ccgtccgtgc accgcctcct tctgcccggtg tccccgcag 180
gtagaggggg gcgggagggg gtgtgaggga gaggagagag nnaatgana 229

<210> 4597

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4597

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agcgcgcccg gcatggcggc gacaaggagc cccacgcggg caaggagcg ggagcggctt 120
ggcgctcccc ccgcaggaag tgaccaagtt cactcctgga tgctagctac aagccaagcc 180
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tcatggatga aagaaaagga cattgttaag ctccctgaaa aactgctggt ttcacaaggt 600
tgtaattgga ttcagcagta cagttttggn cctganaagt atacaaggct ccaatgttgt 660
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<210> 4598

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4598

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aagaagctga acatttgctt caggatgccaa ttaagaatgc caaatcaa atgaatcct 660
cattttatgc tgtcaaaact agcccgnat cttttcaaaa tacaagaaaa aaccttccaa 720
aatcaangaa anggggcttt tgggaagcaa tcccaaag 758

<210> 4599

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4599

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 gatgcaccac taaccaccat ggaaacaagg aaaaataaag ccagctcaca gggctctctct 120
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 aataaatgaa ttactcaatc tcctatgacc atctatacat actccacctt caaaaaagta 720
 catcaattat tataatcatta agggaaatag tancctctcn tctccaaata tgcatgacat 780
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<210> 4600

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4600

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 gtctttgact tcaggccctc cctggaattt ttcttggaag ccccatcagt ccttctctct 180
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 ttatatgtgc agattatittt ccttgggctt caagcttcca aaaaacttgt aataatcatg 660
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<210> 4601

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4601

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<210> 4602

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4602

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<210> 4603

<211> 810

<212> DNA

<213> Homo sapiens

<400> 4603

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<210> 4604

<211> 718

<212> DNA

<213> Homo sapiens

<400> 4604

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 tcgcacctgt ctgaagcagt gattttagcc agaatctaga tttcctgatt ctgggtccagt 180
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<210> 4605

<211> 733

<212> DNA

<213> Homo sapiens

<400> 4605

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aggattttcg ggg 733

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<210> 4606

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4606

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cctacggaag aaagaaatac acccagacaa ccttggaccc aagcacctca gccgagacat 180
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<210> 4607

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4607

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 agtacatttt tttttctctg taattgttta ggaagcagtg cttcctgaaa gaccaaacca 180
 agatttttgc attatgtggc ttgacacact agatgagcat ttaataagtt caagcttaat 240
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 gacaaatcat gttttgatga gcttacgttc tgtttccggg ttcancttct caatttagnt 540
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<210> 4608

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4608

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 gtcatactgt gtagaaattt cnattttctt tttccccatt anaagaggac caaacaattc 600
 tttatacaaa tggagtaagc aactagtttt gtagcactac atttaatggt aatgagatac 660
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 aa 722

<210> 4609

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4609

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 agctgcttga gagcaaagcc tgcctacagg attcctatga caacttacga gaaataatga 180
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 agtgatcagt tccctggaaa agtctaagag atctgataag aaagttgtag cctgaccctc 720
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<210> 4610

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4610

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 gatatctttc ctacttgcct gagaattttc tggcattgac ttccaaaaga ggtctgtttc 420
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<210> 4611

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4611

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ctaaaatgga ctggtcttgg gtgtgtaacc ccggtgaagt tatagcctcc ccaaattgag  180
gtgacagaag gaagacaaga ggtgtaagct ggagagggaa gggaagaaat cagtggcttt  240
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gagctcacc ccatgcatag ggtgtgggaa gagggcacag gaggcctcat ccatggggga  480
aagggttgag gatggacatg ggtggggaga gggcatagac atcccttcct aatctctgtt  540
cccaccacat ttcatangag atgagttagg anatgacagc taactctctt aaggacattt  600
tgaccccagt ttatgttggg gatggccata aaggaaaatg tctanagata ggaaggtaaa  660
tcaantctgc caaccctac catcaggtct ggggccaccc caaactttgg gctgcctccc  720
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<210> 4612

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4612

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gttttctctg tttgaagggc tttaaactta taacaaagaa aataaaaatg acgacttcgt  180

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ctatcagacg gcagatgaaa aacatcgtga acaattactc agaggcagaa atcaaagtcc 240
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 cccaagctct caaaaccaa gagcgcattg gccaaatttc cactgggcat gggcagcaac 660
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<210> 4613

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4613

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 atatattggt tcttgctaac ttgatctata atttcaatgc aatcccaatg gtataagttg 180
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 tttctgcata ttgccaaact gattctaaaa tttatatgga gaggcaagag acaggatagc 660
 caacacaata ttgaaggag ggagaacata gttggaanac tgacattacc caacttcaag 720
 nactaattat taaagctaca ctaaatcaag acagntatgg tattggtgaa a 771

<210> 4614

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4614

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ggccggggcta ggcccgtacg gcgcggggaa ggcagtctgg aaaaggcgcc cgcggcagcg  180
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gcttgccgtc agctgcggca tcttccgcac cgagtcgggg gcttgccgcc ggctccttct  480
tgtccccggg cggtcgcgga gccgtgggtg caggctggnc ggtgcaaanc gtgtggccaa  540
nctgtcacc                                     549
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<210> 4615

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4615

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gatcccagga agggcacacc ctttcctcac caccgagtg agcgctgcc cctcacagag  180
acctctttgc cccctgggcc aggcagagca ggcgctgcgg tccgggaggc cccatggagg  240
tggcgggtgcc cgtgaagcag gaggccgagg gcctggcgct ggactccccg tggcacccgt  300
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tccgccgctt ccacctgggc gacgcgccgg gcccgcggga ggcgctgggg ctgctccgcg 360
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 tgggtgctgga acagtccctg agcgcgctgc ccgccgacac gcaggcctgg gtgtgcagcc 480
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 ccacaggtgg aaaggaggac aattgggatg attcccttaa ggaacgcccc ttggggctga 660
 aggggnccgg cgctggggg aatcccaagg ctgtgcgcc ctacaagcaa ggagncccaa 720
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<210> 4616

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4616

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 tactgcccag caacatttga aacaggtgtt gggttatcaa atcatgtcag ggggcatctt 180
 cacagagcag gattaagcta tgaagccagt catgttgtat caccagaaca aatagccaca 240
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 aaagctatag agaagtctga aaccacttct gaacacactt gtcagctctg tgggtggttg 360
 tttgatacta aaattggatt atcaaatcat gttagaggcc acttgaaaag acttgaaaag 420
 acgaaatggg atgctcacia atctccaatc tgtgttctga atgagatgat gcaaaatgaa 480
 gaaaaaatatg aaaaaatctt aaaggcattg aacagtcgtc gtattattcc cagaccattt 540
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 agcataccgt aatgggctaa agactgaagc tctgtcagtg tccgcatcag aaagaaagaa 660
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 agaatcagtc nccttaaact catngaac 748

<210> 4617

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4617

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cgtcgtggag ggcagcaacg tctccggggc cctgtgcatc tcccaggcct ggccgggcat 420
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acatcaaagg agaagctgcc tttgccttca atggtggtga aaagataatg gcggggtgac 720
tcaaaatgtt ggtggtgcaa ggagctcaaa ttccatgggn ggncaacca aagatttncc 780
aaattatt 788
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<210> 4618

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4618

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catgctggca aggagctggg gttatgaagg gaaagagcag ggcacaaggc aagtagggct 120
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cgtgactttt cccctttcat tatgtgtgtc caccgagctg tcctgcttct gttttgtaat 180
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 ttaanccctt gtaaaaacaa tgaaaataag taanaagttt gtgggtggtg gtggtttgaa 720
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<210> 4619

<211> 615

<212> DNA

<213> Homo sapiens

<400> 4619

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 ggaggagctg canaagcaga agtcggagct ggagcgcgan gtggacaagc tggcgcgcga 540
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<210> 4620

<211> 559

<212> DNA

<213> Homo sapiens

<400> 4620

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<210> 4621

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4621

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tccaagcagc cacagactca aaggacatca gtaactgcat ggccaaagca taccacagt 180
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 gcgttccatt ccgcttgacg gaaaaaacgg ttttccctct tgctgatgtc agtcgcattg 480
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<210> 4622

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4622

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<210> 4623

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4623

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gcaataatga ttcatttcta ctacattttg caaaagtgtt tttgttgctt atacacattt  180
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<210> 4624

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4624

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aactggaaaa ggactaccag cctgggatca cttatattgt ggtgcagaaa cgccatcaca  180
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ggaccacagt ggacaccaac atcaccacc catttgagtt tgacttctat ctgtgcagcc  300
acgcaggcat ccagggcacc agccgaccat ccattacta tgttcttttg gatgacaacc  360
    
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gtttcacagc agatgagctc cagatcctga cgtaccagct gtgccacact tacgtacggt 420
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aagagcaatg ggcgggaccc ccaggccctg gccaaagccg tgcaagttca ccaaggatac 600
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<210> 4625

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4625

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<210> 4626

<211> 607

<212> DNA

<213> Homo sapiens

<400> 4626

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ggctgttcac cctaattatt tctaactaat aggggctttt accctatatt ttctataggg   180
ttcgtgaagc atagtattct ggcaacctta aatccatcca agaagaaata agcaatgtgt   240
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cctgccacct tatttttaat gtaaactt gatccttttc agagcacttt cacatttgat   360
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tcggccttac aggtatttga cacctgtgtt gttggnccat ccacagctct attancagca   540
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<210> 4627

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4627

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aacaggagaa catacttcaa gaacgtgtta attccttaga caaagaggaa cagtacatgc   180
aatggaaaat aaatgaaact cttaaagaga tggaagagaa aaagaatgaa atcaccaaac   240
tccaggagca agaaaaggca ctctatgctg gttttcaagc agccattgga gaaaacaata   300
aatttgcaaa cttcctcatg aaggctctaa agaagaggat taaacgggta aagaaaaaag   360
aagttgaagg agatgctgat gaagatgagg agagtgagga atcaagtga gaagaatcta   420

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 cgctcaagct ccaccaagat agagtatgtg ggaatttgn gaaataccta gcgatctttc 780
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<210> 4628

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4628

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 caagcgattc tccgcctcag cctcctcaag tggctaggac cacaaggcaa ccacgcacta 780
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<210> 4629

<211> 782

<212> DNA

<213> Homo sapiens

<400> 4629

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gtgcggaagg tggggggcgg cggcactgcc ggcggggacc gctgggaagg cgaggacgag 180
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taaaaccaga ggtaaaaatt tcagaaaaga aaaaaatagc agagaagata aaagagaaag 300
aacggcaaca gaagaaaagg caagaagaaa ttaaaaagag gttagaagaa cccgaagaac 360
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aagagtcaga cctcgaatta gcaaaggaaa cttttggtgt taataatgca gtttatggaa 480
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gg 782

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<210> 4630

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4630

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accataaagt ccagtgaata tacaagaata caatgctgca ttacagaact ccaaactctga 180
aagtacctcc ctttatcatt cagttctcag atcaaaggctc atttctttaa aggtaatttt 240
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gaaaccatag aatcaaaata gcttgatttc tagctttgtt gtttcatagt ctaactttag 540
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caataaaata tgtattttta gatgggatac cgcaattaat caagggaagt ctgtttacaa 720
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gagggcanag g 791

<210> 4631

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4631

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taaatcaaga caaaagcaac acagataaat gggaaaaaga tgaaatgaca aaagactgca 180
tgctggcgaa tggcaaactg gatgaggatt acgaggagga ggatgaggag gaggagagcc 240
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aggaacacat cagatttata gataatatgt taatggggctc aggagctttt gtaaagaaaa 360
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cctccttagg tagtatgcca tttcatcaa gatgttgagg attttgacta cagctcttgg 480
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cgacttgac actgagcagt gtattgctga caaaagcata acggactgtg tggaaaccct 660
gctgggctgc tatttaacca nctgttggga aaangggctg ctcanctttt ccc 713

<210> 4632

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4632

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gtgggtgaac actgtgtatg tgaaaacact attatcttat gtagtcacaa gttagtcaat 180
gtcaacacac acatttcaca ttccattctt gtatgtacgt acttaaatag ctgaggtaag 240
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tgtatcttgg agtaactttg tttcacagtt aactcttgtt tgaaagtatg agtgttaaaa 480
atggggaaaa aattccacaa aatccttggg ttgagagcca gaaaaatgct tccattttaa 540
aatgttgttt gacagacaaa aaaaaaata ggtttttccc catgtccaag tttaacacca 600
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<210> 4633

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4633

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aagatcctgt tgtTTTTcat ttactataag tcctaagtca aatatgcctc acaccaagca 180
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ttatttatag ttttatatgt ataatcctag tttatcctga gatgtatttg cttttgcttt 540
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<210> 4634

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4634

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agaagagggt gttcacaaca ggtatccagc aatgaggacc tggtagaagt ttttttttct 180
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<210> 4635

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4635

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 aaggcgatg acgatgtttt tgtgaacacc atcacatcct ggaattactt tgaatagttt 720
 tatccaagac caaagccaaa agatttcttc aaangttgat gtgatccaca atgctgggac 780
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<210> 4636

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4636

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 aatgcagtgc acctcaataa tgtcagtgtt gtttctccaa gtcaatgtgc atatcaatac 720
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<210> 4637

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4637

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cttctatggg gaaatcctca ntgtggccat ttgttgggct acctgagacc aagaaaagan 660
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<210> 4638

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4638

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cactcacgtt agggctccag gggcctgcaa tacagcggtc gagagacaaa tatnaccag 660
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<210> 4639

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4639

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 gggteccatc tgtagattct ttgcgccctt cccggctgct gcctggggcc ctttccctgct 180
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 ann 543

<210> 4640

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4640

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gtttcagaat taaaaataag cattatttca tatgggccaa tcagattcgt tacataggcn 780
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gagggcc 847

<210> 4641

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4641

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cagaccattt accaaaagct catgtgcagt cactgtgtgg cactagattt cattttcaac 240
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ggactggagg aagtacagaa tataaatcgt agaaattccc cttatagtca gaccatgaaa 660
tcaagtgcac gcaaaataca ggtttcttgt tcaaacaata cacacctagt ttcagagaat 720
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<210> 4642

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4642

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<210> 4643

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4643

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atttttgaaa aaagtacata tttattttcn tttgaattgt ttttantgtt ttctatttat 660
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<210> 4644

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4644

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aggggtatit tattttaaat cctgtagtaa ttgggggaaat tgagaagatt ataattttan 600
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<210> 4645

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4645

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aacttgagat	cttttggcct	atgataatac	cattaatttt	tgcatgtctt	cagtttgcca	180
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atattacaga	tggaaagaat	gaggctcagg	gaagttaaag	acttggccaa	gatctgctca	300
tcgtcactgt	ctgtacagta	ttttttttta	gaggttgtaa	tgtctcagat	ttagtccttt	360
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tatattaaag	tatcaaaata	tagagagaca	tttgaactgt	attcaggtaa	tatgttttaa	480
gatatttata	tattgccata	caaaaactta	acattttaaaa	ctgataatat	ctgtaatgac	540
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tttcataagg	taatgacaga	tgccctaatg	tgaagcttat	ttataatagc	aataaaccta	660
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<210> 4646

<211> 610

<212> DNA

<213> Homo sapiens

<400> 4646

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gggtccaacc	actctccagc	aggagagact	gggggtgaag	gggtgagccc	tgcgaggtc	180
tctgttcctt	ggtcttcaact	gggcagtgtg	gagaggtgtg	gccaggagga	gcccgcgttt	240
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cctgggccgg	gaacgacacc	aaatgaggga	catggaaagg	ggtgagaagc	ataaatgtgc	360
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tgggactttt	ccagagaggg	agccaggcct	ggcccggggc	ccgggagctc	acgtcacccc	480

cacccctcac ttctccaggg aactgccaaa gccaaaccca gctcgggatg ggattatgtg 540
tactgggtag acccgtggag aggggctgcg anaaagagat ctcggtgggc agaganaanc 600
aaaggcagaa 610

<210> 4647

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4647

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aagagagtac acaaacaat ggaaaaacat tccatgctca tggataggaa aaatcaatat 180
catgaaaatg gccatactgc ccaaagttat ttatagattc aatgctatcc ccatcaagcc 240
atgattgaca ttcttcacag gattagaaaa aactacttta aatttcatat ggaacaaaaa 300
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<210> 4648

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4648

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 gagttatagg tggaattgct gctgctcttg cagcaggaat atatgttatt tgggggtcca 240
 ttacagaaag aaagaagcgt agaaaagggc ttgtgcctgg cttgtttaat ttagggaaca 300
 cctgcttcat gaactccctg ctacaaggcc tgtctgcctg tcctgctttc atcaggtggc 360
 tggaagagtt cacctcccag tactccaggg atcagaagga gccccctca caccagtatt 420
 tacccttaac actcttgac cttctgaaag cttgtcctg ccaagaagtt actgatgatg 480
 aggtcttaga tgcaagctgc ttgttgatg tcttaagaat gtacagatgg caaatctcaa 540
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 tgagcggaga ncgccannct ccgggtcaca a 631

<210> 4649

<211> 877

<212> DNA

<213> Homo sapiens

<400> 4649

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 catcagtgtt tctgtgagca ttcttaaagc ttcttttttag ccacaagaaa taactgaaag 180
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 aatcttgtgt tcatatgagt taaagaaaaa ttcaaatagt aactgtcttt gaatacataa 420
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 nggattgcaa agttttcca aaatatttta tgaagttagt gaagtcagtt gaaaggtgta 780
 tttaaacata tgaaggata cagttacatt tttttaatga gaggaacaa ttgccgtagt 840
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<210> 4650

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4650

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 aagcgttcaa tgcatttcac gtgctgtggt ggatgtgggg tgctgtagac agggcttcct 600
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<210> 4651

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4651

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 gtgcgcccgg tcaactgactc ctccgcgctt tcctcgtgcg cctgcagccc ttggttcttg 240
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<210> 4652

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4652

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 ttttccacag agccaggggc aggacctgg acgcgtttcc cgcagaaaag gaaagcgaat 180
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<210> 4653

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4653

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<210> 4654

<211> 581

<212> DNA

<213> Homo sapiens

<400> 4654

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 ttgcccattt atttctatga aagtagacta aatactccac ttatttcata gcacattcaa 180
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<210> 4655

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4655

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<210> 4656

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4656

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nggaaaa.                                     667

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<210> 4657

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4657

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<210> 4658

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4658

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<210> 4659

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4659

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<210> 4660

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4660

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ttacatgttt gtgtttttct atagcagagc attatatttt gcattatatg tttcaacct  180
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<210> 4661

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4661

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 atgtccntta aaana 735

<210> 4662

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4662

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<210> 4663

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4663

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 ggacctccat ttccagtcg aaggctgtgg gcaaggaaca ccntngaact ccttaagcat 720
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<210> 4664

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4664

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<210> 4665

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4665

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<210> 4666

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4666

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<210> 4667

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4667

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 ttttgacat attcatcgct atttaaaacc tgtggcaaaa tgaacgctta ttttacagac 540
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<210> 4668

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4668

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<210> 4669

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4669

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atacactatg taaatatagt tcattaaatc attctttggt gtttgaagac tttctaattc 180
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<210> 4670

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4670

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 aaaaccaaga ttgactggg acatcccatg ttaacaagat attcaagaca aagctgggtgt 660

ttgaangggg attttgangc cntgcgaa

688

<210> 4671

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4671

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<210> 4672

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4672

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 ganaccatc actgggcatg attaccagta tnggataatt gcccaagcct gtgatcccga 660
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<210> 4673

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4673

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<210> 4674

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4674

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<210> 4675

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4675

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<210> 4676

<211> 547

<212> DNA

<213> Homo sapiens

<400> 4676

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<210> 4677

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4677

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<210> 4678

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4678

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 gaagggatgc ctcaaaaggg cccgnttcc aaccgcaaga ggccgggagc tgcccaangg 720
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<210> 4679

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4679

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 tggggaatgg gtggaagagg cagaggtcag gcagagtgtt caataaagag gatcagacag 180
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gccacttctc tcttatggct ccctgtaaca atganatacg gacacctgna ggcacctggg 660
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tgactta 727

<210> 4680

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4680

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acaacaatat atatagagtg atcgtctctg cttgctgagc taacaggggt gtcaagcttc 180
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gtctatatat tcaataaaccc tcctattgat ctgttcaaaa gaaacangct gcatggggta 660
tgaaaaagct ggggggaaca agtcttttgg caacacaagg gaaannttcg taatcctttg 720
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<210> 4681

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4681

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gtgaacaagg	cgaaagtga	agaaagtga	caaaaagctg	cagagttttc	aaagaagttc	180
gatgaagaat	tcacagctcg	acaggaagct	caagcagagc	ttcaaaaaag	agatgagaaa	240
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tcatacaggaa	ttccagggtcc	tcctgcagca	cctccattgc	caggtgtagg	gccgcctcca	360
ccaccaccgc	cgccacctct	acccggagga	gtctctcttc	ctcctccacc	acctccttta	420
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<210> 4682

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4682

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tgccccattt	aggcctggct	caccggagta	agaaactaca	acccccgaag	tgccttgcgc	180
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cacaccttga	gggccccgaa	tactgaggac	acgggccttt	gccgagtgt	gtactcctgc	300
gtcttcggtg	ctgagaagtc	acctgatgac	ccacggccgc	atggtgccga	gagggacagg	360
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cagcagcagg	catctggccg	gcccccatg	gacctgcagc	cgcaatcctc	agatgagcaa	480
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gagccacgga cgggtggtgtg gctgggcgtg ctctcggtan gctttgccct ggtgctggat 600
gccatgagaa cctgctactg gctgagggca cgctccggct gctgacacnc ctccctccttg 660
acaactccgg ctgctggcgc ccagcaacaa ccttctgctg cgggctgacc gcattgangg 720
gnatcctcaa ccgcttcctg ca 742

<210> 4683

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4683

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cagtttaatt cacttaatgt gatttccttt ccttattgat aagcagactc cattgtagcc 180
agctgatatt ttgcatcag agatactctt gtccaccca gaggggccac tgaagattta 240
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aaataatgct tgcagttcag aattttgatt taccatacta gattagctag aatcttattt 420
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taagggtgtc tgatgtata agcagacacg ttgcaacat ccatctggag gagccctggg 660
ggcaaggatg tgggttgacc acccaggcaa nggatgccct gaatganang gccacaagc 720
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<210> 4684

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4684

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atttagatac ttcgagctca ataggccctt tccagaggaa gctattttgc atgatatttc  180
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cttttctccg actctccttt ccaattcctc ggaaacaggc actgccagtg gactgggttt  300
catccttaga ccagagcaga gtacatgcac ttggtacttg gggacttcag gcatacagcc  360
tgtccagaat atggctatcc tactctccta ctcagaaaga gatcctgtcc ctggaggctg  420
taatttggag ttcgatttag atattgatcc caacatttac ttggagtata atttctttga  480
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ttttctgcct gagaatgact cactgaggag atgttgccgg aagcatctgc anaaggatgg  660
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<210> 4685

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4685

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tggttggttg attgataaac aatagaaact tatttctcac cattctggag actagaagtt  180
tgagatcagg gtgcccgcag gtcaggctct ggtgaggatc tgcttctggg ttgcagaatg  240
ctgacttctt actgtgtcct catgtggtga aagggtgagg gggctctctt ctctccagcc  300
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ccccaccttg tgatcccatc acctgaggg taggattcga acatatggat ttggagggga  420
ggagacacag acactcagtt cattgttctg gtgtgctctg accttctagg cttctctcca  480

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ttcaccttag aaccctact ctcttgctca gctccgtagt aagtttatga ccagtcaaag 540
 caattttgtg cagtgtatgc agaattttct gtgtaagcct tgcattcttt ttggagggct 600
 ttacagaaaa gggaaattac tcanaacaac ttcaatcact tgctacagtt aaaaataatt 660
 tcaccagaca tattaagaga agggtaaaaa ttagttccag aaggattttt tanattgcaa 720
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<210> 4686

<211> 874

<212> DNA

<213> Homo sapiens

<400> 4686

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 atgccacaaa atgcactccc caataaatta agattaaagg aatgcccacaa ccccaaacat 180
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 gcatacacia atccactcag gatgctagga cacaggcagc tgaatgatat gagcttataa 420
 tctattcttc ccagactatt tatcttatca cagcaacacc ctgaagccac atgcaaagga 480
 tgaaccagac tccccagtgc tctatagaac catgagtgaa gcagctctgg tgagaaaaag 540
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 cagttncatg tccaacatct gggggcactc tccatgtgca gatattaaag taaatggggt 780
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<210> 4687

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4687

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actacttaaa atcccatcng tttccctgtc aatgggagtt gggtaacgaa tactccgaat 660
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<210> 4688

<211> 696

<212> DNA

<213> Homo sapiens

<400> 4688

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cttggtgaac atggatgaca acatcatcga gcactactcg aacgaggaca ctttcatcct 180
caacatggag agcatggttg agggcttcaa ggtcacgctc atggaaatct agccctgggt 240
ttggcatccg ctttggctgg agctctcagt gcgttcctcc ctgagagaga cagaagcccc 300

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agccccagaa cctggagacc catctcccc atctcacaac tgctgttaca agaccgtgct 360
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 tagctccaga tgagaccgtc cagcgttccc ccttcaagag aaacactcat ccccgaacaa 600
 cctaaaaaan tcccatccct tctttctcaa ccttccatat ctatatctcc ccganttgg 660
 tggacaaaaa tgagctaacg tctgggggtg caanta 696

<210> 4689

<211> 567

<212> DNA

<213> Homo sapiens

<400> 4689

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 cccaccacag cccactgtct gccttctgct gccctgatca gcagtgcac tgccaggact 480
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<210> 4690

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4690

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atntgttcta tactntntnt tntntntnt tntgagatgg agtcttgctc tgtcgcccag  180
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<210> 4691

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4691

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gcatgaggaa cgtctgggca cgtgtaaagt ggatatctcg gcactccctc tgaagcaagc  180
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agggaagagt gacccatitt gcttggttga gttaggcaat gaccgacttc agacgcatac 480
cgtctacaaa aacctcaacc ctgaatggaa caaagttttt acatttccca ttaaagatat 540
ccatgatgtt ttggaagtga cagtgtttga tgaagatgga gataaacccc cagattttct 600
tggnaaagtt gccaatccct tgctgtccat tagagatgga caaccgaatt gttangtact 660
aaagaataaa gatttagaac aancitttta aggag 695

<210> 4692

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4692

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gagcaagagc ctacttgtgc ctcccagatg gctgagccct tccgtacctt ccgagatgga 180
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<210> 4693

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4693

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accccggtag taaatcatgg ggctggagct caaccccagg gtaggctggc tccagagctg   180
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<210> 4694

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4694

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gaggcctata ataaccctgc agactttcttc ttggacatca ttaatggaga ttccactgcn 600
gtggcattaa acagagaaga agacttttaa gagatcatag agccttccan gcaggataag 660
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agctgaa 727

<210> 4695

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4695

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tatgtgcaca atgagctagc caacatggaa gaagatgcca gatcagctgg agtcgctacc 180
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gtggaaatta ttcattgttac atcccctatg ttggaacaa ggagggcaga ttcattccgt 360
tattcctaaaa caggtacagc aaatcctaaa gtcactttta agatgtcaga aataatgatt 420
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<210> 4696

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4696

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 agagtcacct tgggtgagaat gtcagagata ttccattttt gggtattcac aaaaaagaat 480
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 aagaagaatc acatcacttg tgtgctggcc ctagtgagaa agtcactccc aattctgtgg 720
 acatgggncc angcaagaag agcaangtca catttccctaa gcgctgggtc caagagatat 780
 gtcacaaacc ttttaciaa 798

<210> 4697

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4697

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 tgaagggaga gtttcagttc ttcatgtacg gttgctttca agatgtacct gggaattaca 180
 ccaagtgtga cctgtaacaa ttcaagcaaa aatgaatttt ccctgattct agagaagaat 240
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 ttgctctgtg ggattatcag aggtgccttg gaaatggttc atttggcggc tgatgttaca 360
 ttcttgcaag acagactaaa aggtgacagt gtgacagaaa taggaataac atttctaaaa 420
 aagcgagacg agaaaaaata tagagggaaa aaatgaagac tagcacggaa aatgccacgg 480

ggcggctagc tgagttaatg ttagctaaac atgtatagac atagaaattt tgaattgctt 540
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 aaaaatttca tatgcaaata gctccttaca agatagcagg cangaattcc acatcttaca 720
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 caacacaant tac 793

<210> 4698

<211> 827

<212> DNA

<213> Homo sapiens

<400> 4698

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 gatgtataaa atagacatcg agggccatta agagagtaaa tacttaaaaa tacatgttat 360
 gaaagcaaag ccaataatca ctgtaggagt atgagttgcc taagggccaa aactaatgta 420
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 gtatcttaca gtaaagaaac agaatactgg aatcgttaga naaccctgat gtgttgacct 660
 ggataaagta caaaggtgga aganggaatg agttatgctg ttaaaatctc aggctaattcc 720
 ggttaaaggt cccggctact aatgaacca aacttttttt tcccccttt tgactccttg 780
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<210> 4699

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4699

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ggaaaaaact caaactctga tctaccatca ttgtttaatg ttcggcaaac atgaagcatt 180
ttaataccaa aaaaagtgag gagaataaat ctcagcataa aggaacaact ttttaaaactg 240
aatttagcac tatgaaaaat gtacctcatt ttctgtaatt ttagcgagtt tcccgcggat 300
gtacactggc cccatggatt ggcgctgggg atcaccagtt tagaggtgcc agtgccttct 360
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tgcagagaag tgattgtgaa ggtctccaac cctgtcatgc cccacctgc caccttgact 480
tgggagaggg acactcaca aagcatgtca aatcgacatc catttcttc tctttccctc 540
aggtctcagg gagttttcct cttctcctcg gactctttct ctcaaggcct cttctacaaa 600
aaccctgcc cagagggtta ctgctaaaat gaaactcccg tgtctgtccc cttccctggc 660
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<210> 4700

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4700

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atacagaaat ggaaaaccaa ataccacgtt ctcacttata agggaaagtg aaacactggg 180
tatacacgga cacaagatg gaaacaataa actctgggaa ttccaaaagg ggagagatag 240
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ggggtgaggg ttgaaaaact acctattggg tactatgttc actgcttagg tgacaggatc 300
 attagaagcc taaacctcag tatcacacaa catacccatg taacaaacct gtacatgtac 360
 ccctgaatct aaaataaatt ttttcaataa agaaagaaag gttcttggag gagatagatt 420
 cgatgttaaa tcttctttca tcagcacatg tgtattgact gtcactctct accaggctgt 480
 attctaggta atggatgtag gagagaacaa aaaggtctct gctgttctga agcttatagt 540
 ctattgggga gagatagtaa ataagacgga aacaaataaa tacacagttt cagagagcaa 600
 tgagttctac aaatgagcag tgagccctat aaacaaaatt tagattaaat taaattagga 660
 taggtcagcc tctttgttat agcagatgat actttttata tggnttagca aaggagtcag 720
 gaaggaagta attttaaaaa aggaaaacca gnaaaaaacc tcnttaccaa ccaactttta 780
 a 781

<210> 4701

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4701

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 aactgtgtgg ttgggctcgg tagcacatcg tgggacttgg gtgtgcgccc acagatggtt 180
 tggccctgca gtgaccagag cagcccaagc cgccaccatg gtgaaattgc tagtggccaa 240
 aatcctgtgc atggtgggcg tgttcttctt catgctgctc ggctccctgc tccccgtgaa 300
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 gctctaccgg ccaaacaagg ggtttggacc aaactgggat tcccaacagg tggacttgct 660
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754

<210> 4702

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4702

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gatgctggag attacagaga cactcaagat gcccttgctg ttgttataga ggtagccaac 180
cacgccaatg acaccatgaa gcaaggagac aactttcaga aacttatgca aattcagtag 240
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ctgatgaagc tgtctcgga agtgatgcaa cctcgaatgt ttttcctgtt taatgatgcc 360
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gctggaatga aggtcagaaa acctaccaa gaagcctatc agaatgaatt aaagattgaa 480
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gaagcgattt ccagggaat agaagagtat gccagaaaa gaatcacctt ctgtcctagt 600
aggagtcttg atgaggnaag actcagaaaa taaagaagaa agttagtcct cctggntnga 660
aaggt 665

<210> 4703

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4703

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agcaccaaag ggaaaaagtg caggacggga aaaaaaagtc atccatccat atagtagaaa 180
 agcagctcaa attacgagag aggcccacaa acaagaaaaa aaggaaaaat tgaagaatga 240
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 taatgatgca attcccaaga cgtgcaagag gaaaactact ataactgtag accaagattt 660
 gggggaattg gaactaaacg atgaatcaag tgattcagat tgaggaaatg actgcaatgg 720
 cctaaattgt cctcacttga attgaaaata aataatttga gagcntcaaa ttatantcat 780
 tgattangg 789

<210> 4704

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4704

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 ggctggggcc ggcccaggag ctccccagg gctcccaccg tccatggcgg tgcgggggga 180
 gcccgcattt ccctgtcctt caccacgcgg agctgcccac cccctggagg gtcttgggggt 240
 tctggaagaa gcagccccct actaggcgga aatgggaagg ccaccatgca gaatctcaac 300
 gaccgcctgg cctcctacct ggagaagggt cgcgcccttg aggaggccaa catgaagctg 360
 gaaagccgca tcttgaaatg gcaccagcag agagatcctg gcagtaagaa agattattcc 420
 cagtatgagg aaaacatcac acacctgcag gagcagatag tggatggtaa gatgaccaat 480
 gctcagatta ttcttctcat tgacaatgcc aggatggcag tggatgactt caacctcaag 540
 tatgaaaatg aacactcctt taagaaagac ttggnaattg aagtcgaggg cctccgaagg 600

accttagaca acctgaccat tgtcacaaca gacctagaac angagggtgga aggaatgagg 660
aaagagctca atctcatgaa nggagcanca tga 693

<210> 4705

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4705

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gccggaactg cggcagtcct tccctgccag gctcttcac ccaaggtttct gtggatccct 180
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tactttcttg tcaagatgat tgcaacacct ttgaaacatt caagaattta cttacctcca 300
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caatcaacta tgctaacaga ggctactacc tctaacagtt ctcttgatat cagtgcctata 540
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ttgttgggan cacaagaaaa agtggggaata atgaaacctt cactcctaaa cangagggtg 720
aaaaaaaaaa attgcagcat acctaacctaa tgtgaagaaa angggaaaca acaaatcaat 780
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<210> 4706

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4706

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gaagtaaadc ttttaattga atttgatgac acctgttttc attttgttcc cccggcaaca	180
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gttttttaaa aattttatcc ttttactgac taaatattta aacagggtta taaaacatct	300
gtcagagttt gtgaactcat gttggagtaa aagagtttag gacacataat tggaagtttt	360
gcatgaaaat tcctgagtag ttttagtttg tctttcttag ttatgctgaa gtttttatta	420
gaattataat tagaaattag aaaagtaatt gacagcaaca atggaaaaaa tatctggact	480
cagttgtttt ggaaagctat gcttgctttc cttcagttat tgacaattga gattttttta	540
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gttacactgt tgagactcct gtgagagaga ggtaaagctg acacaaatgt tatctttcct	660
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<210> 4707

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4707

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gacggtgctg atggggacct caggacttat ctgatcagtt tccatcgtc cttgctgggt	180
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accccttgat aaaggccatc aaggatggcg atgaagaggc cttgaagacc atgatcaagg 540
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 tgtctcctgt caatgctcca agcaaggggc aaaagccgga catctccaac aaatnccgag 780
 aagacaccgc tctaaaaaag cctgtgancc gcaaagaaac gcccggaagg gcenntt 836

<210> 4708

<211> 462

<212> DNA

<213> Homo sapiens

<400> 4708

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 gtgaccgtct ggctgctgga gcanaagctg caggtctgct gcanggtgga ggaggtgtgg 420
 ctggcanagc tgcaggggccc ctgtccccag gcaccaaccc tg 462

<210> 4709

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4709

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 gaaactattg ctggatatgt accgttctgc cccaaaggaa cagagagaca aagttcagct 180
 gatggcagct gagaagaagt ctaaggcaga gttggaagat ctaaggcaaa gactcaagga 240
 tctggaagat aaagagaaga aagagaacaa gaaaatggct gatgaggatg ccttgaggaa 300
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 gatgagat 788

<210> 4710

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4710

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 ctggcatttc tccgcactgt ggtgtcaagg aaagagcatg gctttcatgt cagacacatc 180
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 aagaaacttt cccattccc atagtgtctt taatttgctt taaaacactt gaattagtga 540

aaaagccagt tatttattcg aatactataa ttttctcaaa gaatgatcac cattttaaga 600
 ttaattccaa tgttcttttt cataatctaaa taatgttggc atactactga caagagaaac 660
 aagacaaatg tgagagatgt ctgcgtttct cctattaaat aatattacaa ttggnatgtt 720
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<210> 4711

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4711

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 tgggtgaatat ctctgaacct gggcatgaaa cagagagatg tcctaactct ggggtgagagg 180
 aatcctcatt tttctctgcc ctctcactgt ggcatacctaa gaaaaaagtt ttgggttcct 240
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 ccaaccaaca aacacatctc ttttttctgt ctattcactg ggaaagtaaa agcagtctgg 540
 gcgcaggctg gggacccaga tggaattcaa acttatgcct gctctcaagg tgctcacggt 600
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<210> 4712

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4712

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tgacattcag ggacgtggcc atcgaattct ctcaagatga gtggaaatgc ctgaactcta 180
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aaacccatgt ttctaataaa atatgggact ganttcattt gttcttcata ctcacacaag 720
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<210> 4713

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4713

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<210> 4714

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4714

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<210> 4715

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4715

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atgaagactc ccagggtcgc caagaatgan gtgctctggc aaccaacgt gaacttgcca 660
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<210> 4716

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4716

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gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg gaggaccctc 180
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<210> 4717

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4717

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<210> 4718

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4718

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<210> 4719

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4719

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 tccttgagtt gaatgaggac caccggaagg tgangaggac acccccgtcc cactgttccc 600
 caacgagaac tccccagca gatgctcctg gtctatgatc tctactttgt ctcctaant 660
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<210> 4720

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4720

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 gcaagagaag catgggggtgc aattgttcca ctagtaggca aattaaagaa attttacgaa 660

ttttctcaan aaggtagaa agcagcattt aaggaaggtc ttctgggaag ccttaacaaa 720
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<210> 4721

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4721

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tgatgtgtct tttggcgata gagtactgct ggctggaagc ngatgtnaaa cctgggattn 720
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<210> 4722

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4722

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<210> 4723

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4723

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<210> 4724

<211> 899

<212> DNA

<213> Homo sapiens

<400> 4724

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 aagtatggat atactcttca gaataagagg aggccttgat ttggcttttc agctagctac 120
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<210> 4725

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4725

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<210> 4726

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4726

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<210> 4727

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4727

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814

<210> 4728

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4728

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<210> 4729

<211> 862

<212> DNA

<213> Homo sapiens

<400> 4729

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 ctaaggcaaa aaacatctcc cgtaagtcc aatacccctg cagctcatct tgaaataaag 780
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 ttcaacgctg caccgttttc tc 862

<210> 4730

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4730

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 caagacccag aacctgctat gcggaacaag ggtgatcagc aacttgtggg aatagacaaa 660
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 aca 723

<210> 4731

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4731

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 gtcgcctcac ccggaagcg caaggggtca gggaactccc tcccctagcc aagggaagct 180
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<210> 4732

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4732

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aagtaatgn nggatgcccc tcccccgagg gcaaagcttt gagcatccca aggtcgattt 720
taanactggt tgttgctggg 740
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<210> 4733

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4733

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tgtatttggt tttgacgtag aggtttcaat tttttcacct tgggggcaaa tgaaaaactt 180
ggcatttttc atttgggaac atataatagc ttgtaaactt ttcagacagc agtaaatgtc 240
tgaaaaaata tcaaaaacag cataaagaca agattatgta gctctaatta tacgtatata 300
attataaaaa acaatgtgca agggttatat tttaaggctt tttaaaatct gattttgatc 360
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ataccaaatg acataatatt ttttatggta gccttttact ttcaagactt aattttcaga 420
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 cttttatgct aagatcttac ttttaagcttt ttatgtgaac aaaagatgta catatagtaa 540
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 ttggaaaaca gcactacgct tagttttcct gtagttcctg agtgatgtct gtgtgttcct 660
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<210> 4734

<211> 875

<212> DNA

<213> Homo sapiens

<400> 4734

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 aggttcgctt ttgcagctga catgtcgaga tcaactcagac cctcgccaaa cttttttata 240
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 acaggatcgc tatgttcctt atcactctgc ccgcattgaa atgtgtaaaa cagcttttaa 360
 ggacaaacag tcaggacaga tctattcaga aatgatccac aacttgcttc gacctgttct 420
 gcaaagcaag gactgtaatt tggttcgcta taatgtcatc aatgcattgc ccaatacagc 480
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 tgataagttc taagaaatat ttataccttt ttatatggaa gataatttat atcatccatg 720
 tttagtgtt ttttaacatc aactttactt tccaggtaat gtggctgtgc aataattttt 780
 taattttacc tttttacttt tccaataacn ttttcaaaaa attttggcna cctaaggtaa 840
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<210> 4735

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4735

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attacctgaa gcgcattcag acaacgtggc tacctttatc atttcattca accctgagtg  180
gccccaaaca aggccctcagg ccggccactt ccttccactt cttggtctga cctctccatg  240
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gcccaggctt gctggagttg gggttatcca cagtcagagg ttcagagttg tcaaattctc  360
caattagagc aagagatgag gaaaggaaaag ggagacgaaa gaaagaggct gtgcctcaga  420
aataataacg ccgcataatc acaactatct gatctttgac aaacctgaga aaaacaagca  480
atggggaaaag gattccctat ttaataaatg gtgctgggaa aactggccaa ccaatgtaga  540
aagctgaaac tggatccctt ccttgcacct tatacaaaaa tcagttcaag atggattaaa  600
gacttaaacg ttagacctaa aaccataacc taggcattac cattcaggac ataggcatgg  660
gcaaggactt catgtctaaa acacaaaaac caatggcaac caaaggcaaa attgacaaat  720
gggatctaataaaactaaaa gagcttctgc acagcaaaaa gaaactacca tcagnagtgg  780
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<210> 4736

<211> 890

<212> DNA

<213> Homo sapiens

<400> 4736

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 ggttaaaaga aaaggtccat ccacatcgtg gcgctgggga acgaggggga cacattccac 180
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 ggggacgaga gcagcttggt gctgaacgcg gccagcacgg tcgctgctcc ggtgttcacc 300
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 gtgatcaaat acaacgttaa tgacaagttt tcattccatg aagtaaagga taattatatt 480
 ccagtataaa aaagagcatt aaattcagtt ccagtaatta ttgctgctgt tgggtaccaga 540
 caaaatgaag agttaccttg tacatgccc aatgtacct cagacagagg gagctgtggt 600
 agtacaactg aagggatcca acttgcaaaa gaactaggag caacctatct tgaactccac 660
 agccttgatg acttctacat aggaaagtat ttggaggag tgttgagta ttttatgatt 720
 caagccttaa atcagaagac aagtgaaaaa atgaagaaaa gaaaaatgag caactccttt 780
 catgggaatt agaccacctc aacttgaaca ancangaaaa aatgcctgtc ctaaaggctg 840
 aagcgtcaca attataactc tgacntaaat aacttgctgt tctgctgcca 890

<210> 4737

<211> 894

<212> DNA

<213> Homo sapiens

<400> 4737

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 ttcttggttt cagtaggggc aacaacagtc cacttctcag acaaacaatg gctttgtgac 180
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caaatggtga tctgtcgtct ccaaaaagaa tttgagagac attttaagga cctcaggttc 480
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 agaatcaaag acttggggca gttttatgct ggattgtctg ctgaatccta cccaattatc 660
 aaaggggttg cctgtaangt ggcatacctt tttgatagta accaaatctg tgaaaaggct 720
 tttcatatatt gactcgaaac caacacactt tgagtcagcc attaacagat gagcatctcc 780
 naagccctgt ttcggggttg ccacaactga aaatggagcc ccggttggga tgaccttgtg 840
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<210> 4738

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4738

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 cagttctccc tgtatgggtg ggagaattgc ccattctttc ttacttctga caactggctc 180
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 aaacatgtat taagttccta ttatgtcaga tgtgcaaatt cttatggtaa taaaaagatg 480
 tatgagacat agacacttta tttagtcaaa cactcaacaa tatttgaaca tctactgtgt 540
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 ctcttcactc cactggctgt aacacatttc tactctgaga tcttcattgc acaacttctt 660
 gaacaagtgt tttcaatagt cactcncttc anattttttc ttccanttcc tcaaacatac 720
 aggaagaaaa cgttgtggtt ggg 743

<210> 4739

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4739

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agttanccca agaagattct ctctacatg ggcaattttc acaagcagtc actcccccta  720
acccatcatc acacaagatt tattcaaaag nccaaccgat tatctcaatg gngaagaaca  780
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<210> 4740

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4740

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 tgggggggaan tcatagaagt aacagtttta catattgatc aagttgggat gtcctggagg 720
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<210> 4741

<211> 755

<212> DNA

<213> Homo sapiens

<400> 4741

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 tgtagagac tgaagattgt tagggcacct tagaatgtct catcttttct aggttgtcaa 180
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gagccaccat gcccagccaa agntcatttt ttaaatagac ttcaaccctt tgtaaatact 720
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<210> 4742

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4742

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caagcccaga ttgtgaaaga gaaagttcac ttcagaagtg aacatagcaa ggctatcttg 660
gcaagaagca agctagaatc tcnttgcana gaacttcanc gtcacaataa 710

<210> 4743

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4743

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 gcgctggacg accggctcta ctgcgtctac cagagcatgg tgctcttctt cttcgagaat 180
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 tacnggtggg ttatgaaggg aaaagacnat ggaggggcaa cgan 704

<210> 4744

<211> 813

<212> DNA

<213> Homo sapiens

<400> 4744

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 cagatcacc atgtttcttc agcagactct cctgctaccg ttgactcaga aacaataaca 240
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 actgctagtc ccacagtaac cctgacagct gctgctcctg cttctcctga acagattatt 420
 gttcatgctt tatccccaga acatttggtg aacacaagtg ataatgttac agtgcagtgt 480
 cacacaccaa gagtcatcat tcagactgtt gccacagagg acatcacttc ttccatatcc 540
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gccctagaag cagacacttt cccagatgaa attcatcacc ctaagatgac tgtggagcca 660
 tcatttaatg atgctcatgt atccaaattc agtgaccaa atagcacaga actgatnaat 720
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<210> 4745

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4745

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 gtgatcttgt tggaggcctg atgactgacg gcttgagaag actgtcagga aacgagtatg 360
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<210> 4746

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4746

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<210> 4747

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4747

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 gaccacacca aggaagccgc cgaggccgag tcagggatgg ccccgggcgg gcctggggaa 240
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 aatcttctca acagtgtgat tggaagagcc ctcgcatct cecatgcaaa agacaaacta 360

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gctgcancct gccagctggt caagggttgg ggtctgctag gtccccggaa tgagttgttt 540
gacgcagcca aataccgagt gctagctgat cgctttggnt cccctgccga nagctggtgg 600
cgtccggaac ccatnatgcc cctacttcct ggcgg 635

<210> 4748

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4748

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<210> 4749

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4749

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acgtattgat tatagcagta ctatagttat tctgctgtca ttattaaaga tgattatatt  180
cattcaaagc tttagatgtg tcccatgtgg caagaaagga gacagtgaat tttgtcaaac  240
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gttatttcca ctgaaatttg ttatgtttta ggaaattaag attttaagct tgaaattata  360
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taattcc                                         787
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<210> 4750

<211> 625

<212> DNA

<213> Homo sapiens

<400> 4750

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gcattggagag ctgcaacact tgaaggctgg aaactgtacc atgaccctaa tgtaaatgga 240
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<210> 4751

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4751

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 tctgaataaa ggatgagccc agggcctgct gccactgtc tgctctgatg accctctctc 180
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<210> 4752

<211> 431

<212> DNA

<213> Homo sapiens

<400> 4752

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actgagcaga gcagagcatc tagccaaagg ggagatgagt ttgtctgtcc tctgctgagg   180
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ggatctggcc cctcgggtggc agcgtcatcg gtagttttaa ccccttcgng gctggntttc   360
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<210> 4753

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4753

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tgaggaggca gacgtccggt cccttgtagc ttgctgtgtg ggacaaggct gaggactcag   180
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aagaatcagg tgcagaagtc tacttcagac atcgtgtgac acagatcaac ctaagagatg   480
acaaatggga agtatccaaa caaacaggct cccctgagca gtttgatctt attgttctca   540

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caatgccagt tcctgagatt ctgcagcttc aaggtgacat caccacctta attagtgaat 600
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 ttatgaagct ggtacgaaga ttgatgtccc ttggggctgg ggcantacat caccaagtta 720
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<210> 4754

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4754

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 tagtcaactt tctaattgaa tggttaaagt tatatatattg taaatgttat tgttataaaa 480
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 ttattaaaca caaaattgcc antgtttcaa gtagttcccc ggatcgatan gaccaacaac 720
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<210> 4755

<211> 697

<212> DNA

<213> Homo sapiens

<400> 4755

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<210> 4756

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4756

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<210> 4757

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4757

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<210> 4758

<211> 898

<212> DNA

<213> Homo sapiens

<400> 4758

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<210> 4759

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4759

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<210> 4760

<211> 626

<212> DNA

<213> Homo sapiens

<400> 4760

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<210> 4761

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4761

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aattgcttta atgangccca tggttactca aggattcctt aagtaaattc aggaaaccnc 780
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<210> 4762

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4762

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ggagtgaact agaaaaagt gcttactagg gcctaagagt tgctttgtgc cgtgtagtct 120
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ggcctttgca ctagtagatc attgctgaca taggtcagtt tagagacctt tctgtgttaa 180
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<210> 4763

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4763

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 tcaaatttac tcaagcttgc ggatttcctg agagtactct gagtattatt gctttgtact 540
 aaaacacagt atgttantgt atttaagtc cattataagc agttttgcta agcgaaaaat 600
 gagtgtgttg tattaataaa ataattgat aaaccaggca anaatagtgn catgtttttg 660
 ggtttttgaa acnatca 677

<210> 4764

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4764

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ctgggtacgc tgtgccaaat tttcacccga tgaaagacta attgtgtcat gtagtgagga   60
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cgttggattt gcaaattttg tggactttaa ccctagtggg acatgcatag cttcagcagg  180
ttctgatcaa actgtgaaag tctgggatgt aagagtgaac aaattactac agcattacca  240
agttcacagc ggtggagtta attgcatatc attccatcct tcgggtaact atctcatcac  300
agcttcttca gatggtaccc ttaagattct ggacctctta gaaggaaggc tcatctatac  360
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taatccaaag cttgaggtaa tcgatttgca gatctctact cccctggta agggataacc  660
ctttcttttt gattcctacc aacaacaaac aagaaaccca gtgggtaagg actcctggcc  720
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ccctttaaa                                     789
    
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<210> 4765

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4765

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 acatgctccg agatgatgga ggctttgagt acaagcgggc cattgtggac tgtataatca 660
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<210> 4766

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4766

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 agaaaatgta acctttgtga ttggtttacc ttttctttaa ttctagggtg ggtatatggc 180
 tgccaaggtc cagaaattgg aggaacagtt tcgacagat gctgctatgc agaaggatgg 240
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 cctctcctac attccatatc agctgtacac caagcagtc agtgtgcaga aaggtctcag 540
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 gctcaacaac agggtaaata acatcgttaa gaagattgaa acngnaaatg aagtcaaagt 660

caatgggcat gaacagttgg aatgaagaag atgaaaataa tggattttta gtttttgggg 720
atctgggagc aaaacctcct ccgggggaaag ggaaacaaga atgggnantc ccgcatccca 780
ana 783

<210> 4767

<211> 651

<212> DNA

<213> Homo sapiens

<400> 4767

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ggacatccag atgcataaaa atgaatctag atattttgca tttcctgtac cattttgtat 180
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ttttgcaa attttctcca aggctgttgc ctgccttggt ctcttgacat tgtcttgcag 540
agcaaaaaaa atcctaggct gcaagttaca gatttgggaa agttaangag catattggtg 600
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<210> 4768

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4768

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 caaatgtata tcacttaaaa atgtcatata ttctgtctgc gtaaactaag gtatataatt 780
 catatgtgct ctaaatgcag tattatcacc ggccccgcaa aangagtgtc taagnccaaa 840
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<210> 4769

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4769

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 cccaacagct ctactttcta catctactct ctaccaccgc aaaacttctt tcagttccat 180
 gaaagggccca tgtttttctg gtctcttggc ctaggagcat gttgttcttc tgccagcaac 240
 ctctttcaac catccccaca ggatgactcc tctattggat acttccatga aaagtccagg 300
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atattagttg actgaagaat gactatgtgg taatctattc cattggtggc ctccagtga 540
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acagaatgct gcagaagcga caccctgcc a ttgtgtctt tgtgatccta gccaccagta 660
agaagccctg tgaccttgct gagacctgaa gagacacata gaganggcac ttgaanggca 720
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tna 783

<210> 4770

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4770

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ttttttttga gatggagtca ctctgtcacc taggctggat tgcaatggtg caatcttttc 180
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atttcacat gttggtcagg ctggtctcga gctcctgacc tcgtgatcga ccttccttgg 360
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tcaccaaagc tactcangaa gccaaagggtg gaggaccct gcagcacang agttcaaggc 480
ttcagtgagc tatgggtgca ccactacaca tcagcctggg tgagagagt agaccatgtc 540
tcagaaagga agaaaaatta tccacttgta ggttgtctct aattacttcc ctgaccgcga 600
ctcttcattt gtccaantgc tgcagctgtg ctctcaacaa nttttacaac ttctgggaaa 660
natgcccattg g 671

<210> 4771

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4771

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 ccgttaggct gaagattgca caaacatgc taatggccag catggatgga gggagcgtgt 180
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 tgatcatggc tggctggagt gcagtgggtgc aatcatggct cactgcaacc tcaaattcct 360
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 aatcttgctg ttgccattc aagtctggtg gttcctgtgt gttggggtgg ccttgcttct 480
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 ctaaccagag tgccccatc ctgaatagag gctggataaa gccaaacctg ctgggttata 600
 gtcccagggg attgggcaat cctggtcaca agatatttaa gggttaaggg aataaagtta 660
 atgntgctaa gtaaataaag ancctgaaat ccttcccggtg agaanattca aagaaatcaa 720
 ctctgggaa tctgggaata aagacccttt ttcccggtaa aaaaaacccc tngccctggg 780

<210> 4772

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4772

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 ctttaa atgc cacaaccgta gtaacaacag tttatcagga gccattatg agccagggag 120
 cagccttgag tggtagcct actactctga ccaaggaaga agaaaagaaa cagcctgatg 180
 aagaacccat ggacatggtg gtggaaaaac aagaagaaac ggaccacaag aatgacaatc 240
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 ataaagagag catagctgaa tcaaaatccc cagagatgtc catgcaagaa gattgtatta 360

gtgacattgc ccccatgcaa actgatgaac agacaaacaa ggagcagttt gtgccaggtc 420
 caaatgaaaa gcctttgtac actgcggaac cagtgaccct ggaggatttg cagttacttg 480
 ctgatctatt ctaccttcct tacgagcatg gacccaaagg agcacagatg ttacgggaat 540
 ttcaatggct tcgagcaaat agtagtggtg tcagtgtcaa ttgcaaagga aaagactctg 600
 aaaaaattga aagaatggcg ggtcacgaag cagccaaagt tttgaangan attgtgtggg 660
 acctan 666

<210> 4773

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4773

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 attaggagga gttttgaggc agcagctggt tgtcagtaaa gaattacgga tgtatgatga 180
 aagggcacaa gaatggagat ctttagcccc aatggatgct ccccgttacc agcatgggtat 240
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 aaaaactgct gttgatacag ttttcagatt tgatcctcgg tataataaat ggatgcaggt 360
 tgcataatta aatgaaaagc gcacattctt tcacttgagt gccctcaaag gacatttgta 420
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 aatgaatgag tggagctatg ttgcaaaaat gagtgaaccc cactatggtc atgctggaac 540
 agtatatgga ggcttaatgt atatttcang aggaattacc catgacactt tccaaaatga 600
 gctcatgtgt tttgaccag atacaagata aatggatgca aaaggctcca aatgactaca 660
 gtcaanaggg cctgcaattg catgtgtaca gtttggggan aagcctccaa ggncattggg 720

<210> 4774

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4774

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 tcaatttaaa attaggtaaa ctttttatga tactataata tatatgacgt tgaaatgaca 180
 ttggttctga gtctattaat ttaaattttg ggatcattac attcagaatg aaatgaaatt 240
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 caaaattagt atttattgat ttggaagtgt tcaattgaga gtaaattgact ctgtgttttg 420
 aaactaatac ctttgcattt aaaatactga agtattatct tgtagttga agtagatctt 480
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 aagggccgtt tttaaacttt aagcactagt gggattgaaa cctaacctta atatttgact 660
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 tagnaattaac ccttaccnaa aatttatcaa ctttaagg 758

<210> 4775

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4775

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 ttatacttga ggtaacacat acctgagtgc taacctctag tctgcattaa aaaagaatca 180
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 gaaaagaatt ataggaagct agatgaattg tttatctaag ttgtcaatgc aaagcaaagt 360

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 aaatatttca ttaggtatct ttgaaagata aggatttttt aaaaatataa ctctaattgtc 480
 atttatattt tcaaataatag ctagtcagtg ttcagatttt cctgttagtc tcaaaattct 540
 ttcttatggg gtgtttattg taatcanggt ccaaataata tctatatatt gcaattggnt 600
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<210> 4776

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4776

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 gccagccata aggatatcca actgttgtat acacagagct tctcctaact ccgatgaaga 180
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 cagcagcaaa gcactgcaaa gacagaacag cgaaggatct gccagtaagg ttccttgcat 480
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 aggcgcccga atccagccat tacctgtctg actgcggtat atcttcagnc acaggaaagc 660
 cagnntcaaa aacaaaaatg g 681

<210> 4777

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4777

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ttcccttggt tgca 734

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<210> 4778

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4778

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 aagaccggca attgtagtac ttcccaatgt ccatgggttaa tgaaaaggca gccatttggt 660
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<210> 4779

<211> 834

<212> DNA

<213> Homo sapiens

<400> 4779

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 gcatcataga tcatagaaac tttctctctg aatcataccc atgtgtgaat tttcatttta 240
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 taccatttg tgagcactta aaacactcca cagagtcaga cagtgggaaa ggtcaccctt 660
 tttttaatcg gcaggtatca agttagaatg tatggaattg tgaataaaaa ttatatttta 720
 ttttatgaaa atattttata taataaaatt taaaaggctg ggaaagccaa aaaaatagcc 780
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<210> 4780

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4780

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gcagagaaag cangtagcta tcagatgact gtcaacagag gaggttcttag aggcctgaga 600
gaacctatgg gttataaatc tcaagggact cctatcaact tcangtattt cagtgttctt 660
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tgntagctga attaaaa 737

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<210> 4781

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4781

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tttgaggcat tgacagttgt gattcagcac ctgctgtctg agcgggagga agcactgaaa 240
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<210> 4782

<211> 634

<212> DNA

<213> Homo sapiens

<400> 4782

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angaggagat caggattgga gctaagccct gacctcatct caanctgctt ggncccttga 600
aaagtacctg gacaatccca acgccctcac agag 634

<210> 4783

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4783

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gaggtgaaac gtgttggaga tacccttcta ggtatggcca cacagtgtgt ccaggtaaaa   180
aatgtagtga agacctcacc tcaaaccctt tccaatcttt gcctgaagat aaatgcaaaa   240
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<210> 4784

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4784

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gaacagttgg gactagaagc aaaagtgatt ctgggactaa aataggaagc agatgtcctt   180
tccaatgtg tgttgctgtc ttcacctgaa tgcatttgtg taaaaatagc ggagggacaa   240
tgtgaacatt tgtatttggg agctatgaat ttactctgaa gtttgagtt gtttccaatt   300

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<210> 4785

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4785

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 tctacatcac tgtaagaatga ctatcattaa caataataca gagttttcag tagctaggag 180
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 cagcactttg ggggtctgag attggaggat tgcttgaggc caggagtitt aggctgcagc 420
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 aaaaaataaa aatagctggg gatgatggca gatgcctgtg gtcccagcta cctgggagac 540
 tgangtggga ggattgcttg aaccangtg ttggaggctg cagtgaagca nggactgcac 600
 cactgcactc caacctgggt gacagagt 628

<210> 4786

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4786

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aaacaccgga cacgcttggc agaaatcatc gacgattgtg tgacaagtga agaagaagaa   180
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acagacccca ccaccatctt cccctgcaag gagtgtggca aagtcttctt caagatnaaa   600
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<210> 4787

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4787

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cagccgcaag cgccgaggag ccggaagaga ggCGgaaagg gcagcaggct ccttaccag   180
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cattacgggt ggccgtgtgt agccaagttc aagctctccc tccgggaatg cctgccgcgg   300
cggcggaata cggcttcttc aggacattca gcaaagcggg gaggcgggga cctgcgggcg   360
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gcgccaggcc gcagaggctc cggggaaagt tctcttgcc gcgcgagtgg tggcgccccg 480
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<210> 4788

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4788

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 ggcggcncgt ctccccgacc tactggtctt tcggaagcct cggggatggg aaccccagc 720
 tcgccacggc caanggggtc ctcccnaggc gtccatgtta ccggttnagg gcgaacgg 778

<210> 4789

<211> 627

<212> DNA

<213> Homo sapiens

<400> 4789

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 agagatggaa ttccaccgtg ttgcctaggc tggctctggag ctcttgatct caagcgatcc 180
 tccctgcctc ggccctcccaa cgtgctggga ttataggcgt gagccaccgc tcctggccag 240
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 agaccaacag agctttacgg ggtcccggac ctactccttg gtcgggcang catggccagg 540
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<210> 4790

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4790

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 aagtagctgg gactacagtg gtaggaatgg gatcctgggtg cttccacatg actctgaaat 420
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<210> 4791

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4791

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 tgggcgtcgg tgctgcgtgt ctgggacatg tttttctgtg aaggcgttaa gatcatcttc 180
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<210> 4792

<211> 583

<212> DNA

<213> Homo sapiens

<400> 4792

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gatcggctgg tgcataatcg gcctcttact actggctatt ttggcattct gctggatata 120
tgttcgtaaa taccaaagtc ggcgggaaag tgaagttgtc tccaccataa cagcaatttt 180
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gtaaatgtac tcaaattaaa acggcactca agtatacttt gggatttggt gtgatttggt 480
cactgcttcc ttanttggt gcctttgttc cattgaatgt tcccaataac aaaaattcta 540
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<210> 4793

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4793

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gtgtccttgt ttttagggaa caaacactga aatatacaat agtagagagg catcatgtct 180
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<210> 4794

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4794

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acttcaagaa ctggtaaatac aaagtaaggc cgctcctcag tctcccagtg tacccaaaaa 180
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<210> 4795

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4795

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<210> 4796

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4796

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<210> 4797

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4797

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<210> 4798

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4798

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gagtccggtc tcccggcgaa agtgagcgag gtttgcccgg agcgcgcacg aggggaaaat  180
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cagaatattc aagtgtttct ttttgccata actttctctg tgaagatgat caatttgagc  660
atcaaagcca gctgccaaagt tttagaggca gaaacattta aatgtgtttc atgcaatcgg  720
ntttggncan cactca                                     736

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<210> 4799

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4799

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atctgcaagg gggaaacagg attttggtcaa gcaatccttt cattactaaa gcttcctttc   60
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atggtcctgg tttctgaggc tgccagaaaag catcttagca atttgtgttt ggaagggtcca  180
tgcctgacta ttctaggctg gaggttccta aagagtaaca agaggaagag aaacaagaat  240
ctctgacact tgttgagaat agagcacagt cccatttgtt tgaaaagaga caccaggcag  300

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ccatgtttat gtgccagaaa tgcattccac ctcaaggagg acttaattta tggacccgtg 360
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 cctggaaact aaaggatttc atgtagtaaa ctatcttcca acccctgtag gcatcaagac 480
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 ctgacagacc tgggttcagt tcttgggtcc tcatcactag ttttgtgact tcgggaagat 600
 gactcccgga gcctcagtga gcctcaatta cttcatatgt aaatgaagta atactatcna 660
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<210> 4800

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4800

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 gactgtggat ggaagaaagt gtgcagtttt tagggatttt acttaggttc gtcttttagtt 180
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 ttatccctat tgtgctggtt atcataagaa gagactgcct caccacttta tagaaccaat 480
 ttgcaaacta aaacactgtt tggagaaggt acaaaactacc tttcaaaaag gctacaggaa 540
 acattttatg aagcagcaaa tattaggaag agagcggata cagaatttag tgcctttgag 600
 aagaatataa ttaaagtgga attaanaggg ggtagaaaa aaggcaattt agaaaantat 660
 tcctggaaaa ctttaattgt ccaaaaggtg aaacangaag attagacaaa ttccctaacc 720
 cttaagtant ttttttaa 738

<210> 4801

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4801

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aggaataaaa ccacagaaga aaatggagag aaggggactg aaatattcag agcttctgca   60
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cgcctgggca agtacgagca cagcatcagc gtgcggcccc agcagctgtc cgggaggctg  180
agcgtggacg tgaatatcct ggagagcgcg ggcatcgcat ccctggaggt gctgccgctt  240
cacaacagca ggcagagggg cagtgggcgc ggggaagatg attctgggcc tccccatct  300
actgtcatta accaaaatga aacatttgcc aacataattt ttaaacctac tgtagtacia  360
caagccagga ttgccagaa tggaattttg ggagacttta tcattagata tgacgtcaat  420
agagaacaga gcattgggga catccaggtt ctaaattggct attttgtgca ctactttgct  480
cctaaagacc ttcttccttt acccaagaat gtggtattcg tgcttgacag cagtgttct  540
atggtgggaa ccaaactccg gcaagaccaa ggatgccctc ttcacaattc tccatgaccc  600
tccgaccca aggaccgttt cagtatcatt gggttttcca aaccgatna aagtatggga  660
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<210> 4802

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4802

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gggcgccccaa ttccggaagg tgctgcacag ctgtggcggc gggactgcg ttagtgatta   60
gagtttcttc cctgccggag gtgggataca cggtagcatc atggtcgagg aggtacagaa  120
acattctgta cacacccttg tgttcaggtc gttgaagagg acccatgaca tgtttgtagc  180
tgataatgga aaacctgtgc cttagatga agagagtcac aaacgaaaaa tggcaatcaa  240
gcttcgtaat gagtatggtc ctgtgttgca tatgcctact tcaaaagaaa atcttaaaga  300

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gaagggctct cagaatgcaa cggattcata tgttcataaa cagtaccctg ccaatcaagg 360
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 tttgacagca gataactaaga tccagagaat gccaaagtga tcagctgcac agtccttagc 480
 ggtggcatta cctttgcaga ccaaggctga tgcaaactgt actgccccta gtggaagtga 540
 ataccgacat cctggggctt ctgaccgtcc acagcctaca gcgatgaatt caattgtcat 600
 ggagactggc aataccaaga actctgcact gatggctaaa aaagccccta caatgccaaa 660
 accccagtgg caccancgt ggaaactcta cagggnatc agtgggcac ntggctgggt 720
 tc 722

<210> 4803

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4803

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 tcttactgtg ttcgtctctc cctttttcag gggaagcctg agctttgctt agtgatgatg 180
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 gattgccctg ttttcgtagc tctaagaagc agccaaaatc cactccacct ccctccacc 480
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 atattttttt gaacaaaata ntttgcatc ggaagcccg agctcctgca aaagtgattt 600
 tggacctaan tatttaagat tatnaggtt accccaactt gcaagttttt ttcaagccaa 660
 gagatacaat cttaatgaag ggtggctnga 690

<210> 4804

<211> 494

<212> DNA

<213> Homo sapiens

<400> 4804

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aagtagcggc ggcgccttcaa gatgcgctgc ctgaccacgc ctatgctgct gcggggccctg   60
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gccacctaca gtgagtacct ggggtggcctc tggcctcagg tgttcctgac tggtcctgct   180
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gggggttgcca agtgtgancc atgggtacct gtgcctattg ccagtcctg gtgaaggcaa   420
aggctcaagc cccccaccta tcccccttga ntctcttttc aagccctgtt gggcagggaa   480
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<210> 4805

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4805

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tgcagaagac tttcagtcgt ttttgctgga atgattgagc ttacattttt tattctttcc   60
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ggaattttct ggatgatttg tcatattatt tttcttttaa ctctttgggg attccatacc   180
aaattaaatg actgccataa agtatatttt actcccagga cagattacaa tagccttgat   240
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tttagtcttc ttgcaacagc gattttggga gcagtttcct ggcagccaac aaatggaatt   360
ttcttgagca tgtttcta atcggtttgcca ttggaatcca tggctcatgg gctcttccat   420
gaattgggta actgttttagg aggaacatct gttggatatg ctatttgtat tcccaccaac   480

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ttctgcagtc ctgatggnc a gccaacactg cttccccag aacatgtaca aggagttaa 540
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<210> 4806

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4806

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tacaatttgt tttttcagat gaagagactt ccagtgatgt gaaaagtagt tgcagctcca 120
aacctaactt ggatactatg tgtaaaggct tccagagtcc tgataaatct aataactcta 180
caggacagc aattacatta aattcaaac tgatttggtt aggactcct tgtgtcattt 240
caggttccat ttctagtaat acagatgtta gtgaagatag aactatgaaa aaaaatagtg 300
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tggttacaag tgatcctttt tcagccagta ctgatatagt aaagcaaggg cttgtggaaa 420
attattttgg gtctcaaagc agtacgggta ttcttgacac atgtgctgtt agctacagca 480
atgcacttag ccctcagaag gaaacttctg aaaaagngat tagtaanctt cagcaggaan 540
agg 543



<210> 4807

<211> 637

<212> DNA

<213> Homo sapiens

<400> 4807

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tacaatagtg caaaggtaat tcatttgaga aagtagtctt ttcaacaaat ggtgatgaaa 180

cacttgata tccatatgca taaaatgaaa cttgatacac attttatgtc tcatacacia 240
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 cacaatgcac agcacagtca ccatcacaca cacgaaaatg ccaatttcta gtctggataa 480
 atataccatg gntatgtaac tatctcttat tagaggaaca gnaacttggg aaagagtgtg 540
 tgggaatgct ttttactccc ttgcaactc ttcaggggcaa tagactatac ttcaaagtcn 600
 aacatttaat aanttcccaa tccaattcng ggaaagg 637

<210> 4808

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4808

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 agctataaga acaatgctct aaaccctgaa gaaatgagac gaagaagaga ggaagagggc 180
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 actggggaga gtgtgatcac aagagagatg gtggagatgc tcttttctga tgattctgac 360
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 atagatgaag ttatcaacac tccaagagtg gtggatcggt tcgtggagtt tctgaagagg 480
 aatgagaatt gtacattaca gtttggaata ngcccctgcc ctggggctct aaacgaata 540
 ttgcctcctg ggaacctctc agcggggacc aaaaattgtc attgaagcag gggctgtccc 600
 catttnata gangggcaga agtcagantt gggagggatg ttcaggagga ggcagtc 657

<210> 4809

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4809

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ctaaagaaat aatagctgaa aacgtcccaa atctgggaag tgatatcaat attcatgtac   60
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taagtaattt taaaaaaatg tattggttca agtgacttaa aaaccacact ggttccagga  180
gcaggttgat agtacctcaa agatgtcacc atctcttgga tgtgctttcc ctgttcattc  240
ctaagcttca tgcagtttca ggggtggtgac cagaagttta catcttatct tccctctccc  300
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ggaaacccca aaataggaaa gctaaggaaa ttttgggcct ggtaacctg ggaaaagggg  540
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<210> 4810

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4810

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gtcagccttt cctcaccgct actccaggtt cactaatgat ctccctgttg cccaaccaat  180
ggttatttgt tagttcacat ttcagttacc ctctcagaag cctttggcac agctaatac  240
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ctgggcaccg ctttagctgc atcctaggaa ttttgatgtg tgggtgtttt gtttttctca  420

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tactggggct tttttgattc cctgattggt aacccttga gcaagcactc ctgtggccat 480
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 aagggggaaa tctctgccaa aaattaggtg ggctaaagga anctgggttt aaaaagaatt 600
 gcacaaaaaa tctcaangta nggtggcaat aatgggggga aacttttttt tttaaaa 657

<210> 4811

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4811

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 nggaacttta actgcaactt cgaaatggtg gtttacccaa nggtttatgg gtttaaccctt 720
 tgaatggccn gttcctggga a 741

<210> 4812

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4812

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 tttacatgtg acccaaggat tagtaaccag ggcatacact gatgaacttt ggaacatggc 180
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 tccagtgaac cgactttttg accttttatt tgaaataaga gaccaatata atgaaacact 360
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 ccctgttgct aatgaagaag aatataaaat tgatcatcagc aaatttcctt ttcaagatcc 480
 agaccttgaa aagcaagtct tccccccaa aaaaanggaa aaatttcccc caatgggtcc 540
 tcaaggttcc aagtggcccc tccaanaant ttttaccbaa ttttcaaaag ggttttttaa 600
 aaaagggaag attttttaaa n 621

<210> 4813

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4813

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 tcacaaaatt gcctaataca aagttaccat gatgcctgcc tcactctggaa ctgggctccc 180
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<210> 4814

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4814

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 ccagcttgcc gtcttgtcca ccgcagacag ctgacagagg ccaatgtana agagatatgg 600
 aagtctatga cattatcata cttacagaaa attcttggcc tggattcctt anaagaagtt 660
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<210> 4815

<211> 548

<212> DNA

<213> Homo sapiens

<400> 4815

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<210> 4816

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4816

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 gaaagaaatc acagatgaca caaacaatg ggnaacacat cccatgttca tgaatagggt 720

caatcaatat tgtgaaaatg accatacttt ggtagatttg caaaaagcaa tctacanngt 780
caatgcaat 789

<210> 4817

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4817

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aattctcctg cagtccaag tatcaaagg gtccttaaact attgtaggg atgaggtttag 180
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<210> 4818

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4818

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<210> 4819

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4819

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<210> 4820

<211> 668

<212> DNA

<213> Homo sapiens

<400> 4820

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 cggaacct 668

<210> 4821

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4821

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tacttccatt aaaatgataa ctgggtgcac agtgccaact gcaagagtgg tgggtgttaca 660
aaggnaacag agcatccagt tagggaacag cgtgncnaca agcctc 706

<210> 4822

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4822

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<210> 4823

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4823

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<210> 4824

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4824

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<210> 4825

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4825

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<210> 4826

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4826

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aatggagaag ctccttaatt tttgggacan nattccggtc gntttttttt taa 833

<210> 4827

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4827

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<210> 4828

<211> 726

<212> DNA

<213> Homo sapiens

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<210> 4829

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4829

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gaaat 725

<210> 4830

<211> 580

<212> DNA

<213> Homo sapiens

<400> 4830

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<210> 4831

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4831

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<210> 4832

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4832

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<210> 4833

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4833

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<210> 4834

<211> 555

<212> DNA

<213> Homo sapiens

<400> 4834

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<210> 4835

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4835

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 aaccttcacc tcccaggctc agggagatgt gcattgagca ggatgggaga gtccatctca 480
 ctgttggtta ctttgggaaa gaagaaataa atgaagtcaa aggagtactt gaaaacactt 540
 ccaaagctgc caacttcagg aactttacct tcatccaact gaatggagaa ttttctcggg 600
 gaaanggacn tgatgttgga ncccgcttct gg 632

<210> 4836

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4836

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aggacggcgg gaagaggagt gcggaacccg cgggaggatg tgcacagagg gcccaggagg   60
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ttaaactgca gagtgcaga gatgcctcag tcaagtcagc caaaaacacg cgggtcatcc  180
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tgttctgtct ttcctgggaa gttattcatc ctggtggcca gccaccgac aaaatggatt  360
tggatctact ggacctgaat ccagaatta ttgctgcaat taagaaagcc aaactgaaat  420
cggtaaagga ggttttacac ttttctggac cagacttgaa gagactgacc aacctctcca  480
gccccgaggt ctggcacttg ctgagaacgg cctccttaca cttgcgggga agcagcatcc  540
ttacagcact gcagctgcac cagcagaagg agcggttccc cacgcagcac cagcgccctga  600
gcctgggctg cccgggtgctg gacgcgctgc tccgcggtgg cctgcccctg gacgggatca  660
ctgagcctgg gccggnenca anctccgga gggaaagacc caaactgggg gctggaa   717

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<210> 4837

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4837

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ttttcacatt actctagtcc ccaagaactg tgggccacca gatgacttca gatgtcccaa   60
tccgacaaag cagatctgga cagtgaatga agctctaatt cagaaatggc tgagctatcc  120
ttctggaagg tttcctgtgg agatagccaa tgagatagat ggaacgtttt cttcctctgg  180

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ttgcctaaat ggaagttttt tagctgtag caatgatgat cactatagaa caggtaccag 240
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 gactagctcc ttacctgatg ttgaagcatt gaggttttat ctactctac cagaatgtcc 420
 cctgatgagt gattccaaca atttcacanc aatagcaatt ccctttggta cagctcttgt 480
 gaacctagaa aaggcaccac tgaaagtact tgaaaactgg tggtcagtac ttgaacctcc 540
 actattcctc aagatagtag aactttttta ggaagtgtg gtacatcttt tgaaactcta 600
 caagatcggg attccccctt ctgaaagaag aattttcaac agttttcttc atactggcat 660
 taaaggnttt agaaatacta catagggtaa atgggaaaat ggggacagnt tatncagtaa 720
 gg 722

<210> 4838

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4838

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 aaaatacatt ttgagagggg tagaaagaat aagaatataa ttaaaagtat gctaacaaaa 180
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 cagcctggac aacatggtga aaccccgctc ctactaaaaa tacaaaaaat tagccaacga 360
 tggatgatgcc tgtctgtaat cccagctact ctggaggctg aggcaggaga atcgcttgaa 420
 ccggggaggc agaggttgta gtgagccaag attgcaccac tgcactccag cctgggcaac 480
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 atttcttttc cccttaaagt ggctgaatcc attggagatg tgatttattt tgcagattca 600
 ccaattccaa acttcangaa tattcaagcg ggaagtcatg tgtaagtac agcctttgca 660
 aagaananac tgtggctggg gtgg 684

<210> 4839

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4839

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aaggaagaca gcaagagagg aacagatgga caaaagaatt ataagactaa cacaaaccaa   60
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aggcggatca cctgaggctg ggagtttgat gccagccagg ccagcatggt gaaaccccat  180
ctctactaaa aatacaaaaa ttagccagac gtgctcactt gaacccatga ggcagagggt  240
gcagtgagct gagatcgtgc caccgcgtc cagcctgggc gacagagcaa gactctgtct  300
caaaaaaaca aaagcaaaaa caaaaaacaa taaatggct gtagtaaatt cttccctata  360
aataattact ttaaattgaa attgattaaa cccctaatac aaaagatata gaatggctga  420
gtggataaaa aaacaagact acatgctgtc tataagaaac tcactttaga ttttaaggaca  480
cacatagagc aatgtgtgtc cttaaacata ttccatgcaa ctggtaaacg agtgcagaag  540
tggttatact tggatcagac aaaatagagt taaaatttaa aactgtcata agagacaagg  600
aaggacatta tataatgata aaacgggcaa ttcactagga agacataaca attataaata  660
ttcactcaac atcagaacac ctaaatatgt aaagcaaatt ctgatagaac taaagagaga  720
aaagcaatac gattaatatc tgagcctctg gctactttgt aaaaaaggaa aaaaaaagca  780
ttacaattac agttacaagc ctcaatancc cactttcaan nagggg                    826

```

<210> 4840

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4840

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 tttttggttg tatntagat ttcagggaaa agtgtccaag ctttcagtgt tggagcaggt 300
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 cctgcggcgcg agtgggaggg agcccaagcg cactgagcgc gtggagcant tcctgaccat 540
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 cgtcctgccc cgccacagac gccgagacag cctccnaagg ggcaacnttg gnaaagcgct 660
 tctgaagaac caaaaagcgg g 681

<210> 4841

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4841

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 aatgaccaag agttttctca atgcccagtt tggaagcctg ttccgcacag accagaaccc 180
 aacctacttc ctaaggcgcc tgtcgcgctt cgctgacatc tacatggcgt ctctgagctg 240
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 tggggttgac ttcatgtggg tctgagtgtt gcttttgaa aagatacaga taagcctttt 480
 gatatttatt ttgcacctta cggagaataa ntctcccaat gantaagaca ggagctagca 540
 gcccancct ccagcctttc ccccatgca 570

<210> 4842

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4842

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ataggtaagt tctccagtgg tgattactga gattttgggg cacccatcac ccgagcagtg   60
tacctgtac ccaatgtgca gtcttttata cctcgccac ttcccacct tccccctgag  120
tccccaaagt ccactgtatc attcttatgc cttegcacgc tcatagctga gctcccactt  180
atatgtgaga atatacattt gggttttcat ccctgagtta cttcacttag aataatgaaa  240
tcccataca cctaggttca gggctcctcc ccaggaaact tctgaggttt ggggagtgcc  300
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gtgacttcag aactgggaag tctaaaccct acagcccctt cttcttctga gccacctact  600
attgttgcag aattgtgtga ctgagtcctg tctccttaaa acgaccataa actcttgagt  660
gcaaaggatt gtattagtca agagtaaagc tatgctgcta nnaaaaaata gtcacctacat  720
gcaaaggttc aatacagtag atgtttattt cccggcttan aa                        762

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<210> 4843

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4843

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aaaaatcaga ataagaagta cctgacatac tttctacatc tgtagttgcg gaagacattt   60
taataggtct tctcatagcc tttctttgct aaggacattg tgactctcca gagagcaaca  120
gtgatggctc tagaatgtct aggaaaaaga agggcttaat gtcaggagtc tgcttggggc  180

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acacaacact agaagatgtc cttctgcaca ttgtttcata tcgagtatgg aacccttcag 240
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 aatgagagtt atctcaacca gccagcacc cctatcccca tccccacact ttcctcatg 360
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 ttagaattat ttctgaatta tcagtctctc atttgtgctt tggagaagca gaaaaggcan 600
 aaggggtctt tggccatctt ctgctggagc ttccanggan gatgtgtctc caagagacca 660

<210> 4844

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4844

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 actcttgga gaatttagtt tagttacata ctttttttaa aagataggct ttcattgctcc 180
 tcagttcctt tagtttttaa aaagtttcca atgtgtaaag aaacttccac ctgttaatct 240
 taagaattgg tagctatttg ttaaaactgat ggcatatgaa ggcaagagtc tatgagtcgt 300
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 cctctccttt ggtagcagtg atagacatga ctaaataana tatgggtcct tttggtttgc 720
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<210> 4845

<211> 622

<212> DNA

<213> Homo sapiens

<400> 4845

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gaagtggcgt acggcatgcg ccggtggcgt gatggagcgg cagcagcagc agcaacagca   60
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gcgctgtgtg cccagcttgc accaccgagc tctggacgct gaggaggagg cctgtctgca  180
cagctgtgct gggaagctga tccattccaa ccaccgcctc atggccgctt acgtgcagct  240
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cgttgctgct gaacagcctg gggctctctc atcaggcagc tagccatacc caaccccagg  360
aaggaaggcc ttggatggac cctcagattg aaggaccggg tggaccttgg ggttggtgaa  420
tcctaaacag agagaattcg aggttgccctg aaaagctggg tgccttgct ccttttcctg  480
gagccaatat acccagtttt tactcagttt gatntatatt ctgggcaagg aagctttgcc  540
tactttattg gcacaatccg ttgttctgtc gtttagtgca tatcngctgg cttcagccct  600
ggcagctgan gaaattgntt tc                                           622
    
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<210> 4846

<211> 476

<212> DNA

<213> Homo sapiens

<400> 4846

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tccaaagaat gttgctacag agacacaatt gaaaggtggg cagcattctc aagctgctcc   60
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gtcttcaa atgttggtt caaagatttt aaaaactttt gtagatagga aaaatttggg  180
agataatact ataaatatgc caccattgag taccatcgat cctagtggga cgcgatccaa  240
aaatatgcct attaaagata atgctttggg tatgtttaat gggaaagtct atctgttggc  300
    
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taanaagggg acagatgttc tgccatcaca aattgaccaa cagaattctg tttctcctga 360
tactccagta agaaaagaca cgttacagac agtgagtcca agtccagtca canaaatatc 420
caganaggtt gtaaataattg ttttggctaa angtaaactt tcccagatgg agacaa 476

<210> 4847

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4847

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aaaaaaaaag aagggggata aagaaaaaca ctggaaaaag gatgacctgt agttaagtgt 420
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agactgtcgt gggctcattt cctcagcgtg ttgatttagt gactcctgaa ggagcagacc 540
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gtcatctaaa tccattcagt anaccgtaca 630

<210> 4848

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4848

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ccctgcacag agcacatcaa atggaagggg ctctgtctca cagctactca ggaggctgcg 180
gcaggagaat cacgtgaacc caggaggcag aagtgcagc gtgccgagat agcgccactg 240
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ataccagaga gggacagggg tcaaaacagg aaagtcacat tgaactggaa ttggtaagag 420
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atgataataa taactatatc aagatgacac ttcaaataaa aatataaagc aggacgtgaa 540
acactgtcct cagcaaaaaa cctcaacaat tgggggggaga aaaaaanaac accaanggggt 600
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<210> 4849

<211> 571

<212> DNA

<213> Homo sapiens

<400> 4849

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atgtcttttag tacaatatat gaattgtata tggaaaaaca tgctttttga aagtcccacc 120
aaaaaggttt ctttatggta tcattaaata taatttcagt ttttatatgt atacatcatc 180
cctgtctctc tttccaggcc gggcatttat atatgtatgg tcagtatatt ttctattatt 240
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agcatacaga tatttaactc tgaggatatgt gtccacaaag ctgcttttgt catttcacta 480
agtcagtggg ttttgcttgt gagagttagg gggttgattt gacccgangc ttcttagaan 540
gaatttttta acattccaag tttatcnaat a 571

<210> 4850

<211> 576

<212> DNA

<213> Homo sapiens

<400> 4850

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aaagatttgg tagaaatgtg ccgtggtgtg caacatccct tgaggggtct gtttcttcga 60
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gaaacaactg gtgacatcag tgattccatg gattttgtac tgctcaactt tgcagaaatg 180
aacaagctct ggggtgcgaat gcagcatcag ggacatagcc gagatagaga aaaaagagaa 240
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gaaggtgtaa atgtggaacg ttacaaacag attgttttga ctggcatatt ggagcaagtt 360
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cctgatgaat ttcacctcca gactttgaat ctttttcttc gggcctgtgc tgagttacac 480
cagaatgtaa aatggtgaag aacataanca ttgcttttaa ttgatagatt accttaattt 540
gcncaccctt aaaaatggnc ctggaatccc agcggg 576

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<210> 4851

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4851

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gatctgccct gactcagtca cagtcagcta aacagcagaa acttagccag cccccgctgg 300
aacagactca gctgcaagtg aaaactctgc agtgcttcca gactaaacag aagcagacca 360
tccacctgca ggcagaccag ctccagcaca aactcccgca aatgccccag ctttccatca 420

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ggcatcaaaa actcaccctt ctccagcaag aacaagcaca gccaagcca gatgtncagc 480
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 cgcaaactgt agtacagggt cttgcagtga aaaaccacgc agcaagctcc ctaaaactgg 600
 cagcagggtc cggaacaaaa ccaaaaaatc tacgntgtaa accccaaaac cccccangag 660
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<210> 4852

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4852

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 gatcaatctt accagagggc cctcagggtt gggcttcaac atcgtcgggt ggacagatca 180
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 ctctctctgc atagccagat ttgaagtac tgataccac cccaaacctt gctgttcaca 660
 gtctccaatt ctcatattc taatggggaa aagttaaggt atttgtttga aaggaaaact 720
 gaaagaaaag acntggnnta naacaaatgg agggagttat a 761

<210> 4853

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4853

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caactaatgg gaaaaataac caagctagca tcataatgac agaatcaaat tcacgcataa   60
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attggataga gagtcaagac ccatcgggtgt gctgtattca ggagactcat ctcacgtcca  180
aagacacaca taggctcaaa ataaagggat ggaggaatat ttatcaagca aatggaaagc  240
aaaaaaaaaa aaaaaaaagc aggggatgca atcctagtct ctgataaaac agactttaag  300
ccaacaaaga tcaaaaagac aaaaaagggc attacataat ggtaaaggga tcaatgcaac  360
acgaagagct aactatccta aatatatatg cacccaaaac aggagcacc agattcataa  420
agcaagtctt cagagaccta caaagagact tagactccca cacaataatg ggagacttta  480
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acttgaactc acctctggac caagtggacc tagtagacat ctacagaact ctccacccca  600
aatcaacaga atatacattc ttctcagcat cctgatccac ancatcacac ttttctaaaa  660
ctgaccacat antggaagta aaacagtcct cagcaaatgc aaaagaatgg aaatcataac  720
aaacagtctc tcagaccaca gtgcantcaa gttagngttc aagattaaag aaacttgccc  780
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<210> 4854

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4854

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agcatgatgc aaggagggtt tgatgtcaaa atgaaatcta tttccttggt tggccaaatg   60
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tcttgccacc tatcaaagaa acatatTTTT tagagtcata aaattaaata ctgtgaaacg  180
aaaagatgca aaggaaataa attgaaaatt actaacaaaa caaaaaaccc ctgaatgaat  240
aaaacatgct atactttggc aaatatagac tatagctgat attcaggtaa gcagacaacc  300

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ctgttcctta tgatgacccg aacaataaga ggccaatcac tgcccctgtc tatgtttgct 360
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 ttgtttgttt gttttcctat atatggcagt agcctctgta gtattctaaa acaaaggggg 540
 gtgcgggggg accctgtctg tgggtgaagt aaatgtgtga ttttaattctg tgcattgcat 600
 ccttaatgtc cttatgttaa tccatatata ntncctaata ttaccttttt tgcantaagt 660
 tagtttacga agcacg 676

<210> 4855

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4855

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 gcgtgccgac atgggaaagt ctctttctca ttgaccttg cattcaagca aagaagatgc 180
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 tgtgatggct tctgtgtttg tctgtctact ctttcttgga ttggctgtgt ttttctttt 480
 ccctcgctct atcgacgtga aatacattgg tgtaaaatca gcctatgtca gttatgatgt 540
 tcaaaagcgt acaattttatt tanatatcac aaacacacta aatatacaa acaataacta 600
 ttactctgtc gaagttgaaa acatcactgc caagttcaat tttcaaaaac agtttttggg 660
 aaaggcacgc ttaaacaaac ataagcatta ttgggtccac ttgatnatga aaacaaattt 720
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<210> 4856

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4856

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gaagagatgc cacttggcgg ccatggcagc tgtagtatcg gcgactccgg gtcaaggccc 60
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ttgctgctga acccctagga cccatcggtt gagacctgca ggactccttt cctcatccca 180
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actggcatct gagaaccagc agcctgggac cttagattgc tgtaagcttt ctctggtgct 480
aatatcagca aaaaggggtc gttgccgggt acgttcaaga ggaangtgcc tcgtgaacac 540
atctgctggt gggaaggcct aaagaactgg aaaagccac tctcttgaa ccaccacacc 600
tgtttaaaga acctaagcac catttaaagc cactgggaaa tttgtgtcc aantgggttg 660
tgggtgaata aaggagggca aaatgggatg attttcatct ccaattaacc ctgctgtcct 720
ctgggctaan gtttgggtgg gaangtta 748

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<210> 4857

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4857

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gagttcgcca gtgggtccagg agccgctttt ttccactcgg gaagacttca gagaagtctc 60
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agcggcctga ccaaggcgct tgcctcacgg acgctcgcgc ctcagggtgtg ttcatttttt 180
gctacggggc ctagacaata cgatggaacg ttctatgaat ttcgtactta ttaccttaaa 240

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ccttcaaata tgaatgcgtt catggaaaat cttagaaaa acattcatct tcggacctct 300
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 tgtaaggaat ggcaagaaca atctatcatt ccaaatttgg ctgcattga taaacaagag 480
 acggaaatta cttacctgat accatgggtcc aaattagaaa agcctccaaa agaaggagtc 540
 tatgaactaa ctgtttttca aatgaaacct ggtggggccaa gtctgtgggg tgatgcaatt 600
 gaaaaganca attaatgccg tgtcaattta ngntacacaa aagtagttgg ggttttccac 660
 acaggatatt ggggg 675

<210> 4858

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4858

tctctgaatg ctgagttctg ccttaaaaca gcacgggtca tgctagatga aagggatctc 60
 tgttttatac tctcatctct tcgctattgc cgtgggatga aagacagcag aaggaaggcg 120
 tctaagtcca gaacaaagtg agcaagacca gctggctgct gttggtagca gaggcacagc 180
 cagcctgtca tggcactggg gggccgaggt gagctgtgcc cctcctcctt gggcttgtga 240
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 gtagctggga ctacaggcga gcaccaccac agccggctaa tttttctatt tctagtagaa 420
 atggggtttc accatgttgg caggctggtc tcgaactctg acctcaagt atctgcctgc 480
 ctacgcctct gaaagtgtg gattgcangc gtgagccacc gcaccaggcc taaacagatt 540
 tctttacaat ctancacat gaacagcaag cattancatt gctccgtcca accaacaacc 600
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<210> 4859

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4859

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aattcataca ggagagaagt catatatatg cagtgattgt ggaaaaggct tcatcaagaa   60
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gtgtgggaag gcctttctcca aaaggtccag gctcactgaa caccagagaa ctcatacagg  180
agagaagccc tatgaatgca ctgaatgtga caaagcattc cgctggaaat cacagctcaa  240
tgcacatcag aaagctcaca caggagagaa gtcatatata tgccgtgatt gtggaaaagg  300
cttcattcag aagggaatc tcattgtaca tcagcgaatt catactggag aaaaacccta  360
tatatgcaat gaatgtggaa aaggcttcat ccaaaagggc aacctcctta ttcacgacg  420
tactcacact ggagagaaac cctatgaatg caatgaatgt gggaaaggct tcagccagaa  480
gacatgttta atatcccatc agagatttca cacaggaaag acacccttg tatgtactga  540
gtgtggaaaa tcctgctcac acaagtcagg tctcattaac caccagagaa ttcacacagg  600
agagaaaccc tatacatgca gtgactgtgg gaaagctttc agagataaat catgtctcaa  660
cagacatcgg gggaactcat acagggggaa agaccgttat ggnttgctct gattgttggg  720
gaaagctttc ntcccanttg tcatgccttg gtttaaccaa aagggaatg cctgcttgca  780
a                                                                    781

```

<210> 4860

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4860

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gaaaggacgc gccggagccg ggtgagtggc cccgcaactg cccctgcccc tgattcttcc   60
ttgcctcgcc gcgaaccccg gcgcccgcgc cgaccgcca ctgcctctgc ccttttccag  120
ataacagaaa gtaacgtgaa ggaattcagg tgactcagac atggaggaga gaagacctca  180
tctggatgcc aggcccagga attcccatac caaccacaga ggccctgtgg atggagagtt  240

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accaccaaga gctagaaatc aggccaataa cccaccagcc aatgctctcc gaggaggagc 300
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 agagagatTT agggccatgg gcaggaaccc acatcaagga aggaggaacc aggaggggca 420
 tgccagcgac gaagctagag accaaagaca tgaccaggag aatgacacca ggtggagaaa 480
 tggcaaccag gactgtagga accgcagacc accatgggcc aatgacaact tccagcantg 540
 gcggactccc caccaagaag cctacagaac agccacaagc aggcgaagaa actgggctac 600
 aagttcttag aaagtcttct gcagaaaaga cctttctgan gtggtcatca cacttgccac 660
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<210> 4861

<211> 730

<212> DNA

<213> Homo sapiens

<400> 4861

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 gcaccaacag ccgggtcacg gtaggagaat caactattac agcatccggc aaacaactgg 180
 aattgaccag aaatgccttc agaattaggt ctttttgaat cataagcaca gccatttaaa 240
 aaaaattttt taacctagct ttttgagtat tttcaacatt cgtttagca tctcacactg 300
 aaaaaataaa tagtgagatc tggaatgtat atagaagaaa agaaaaatcc attctgtttg 360
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 ttcagggttg gaaagctttt ggctgtgaca ccagtttgaa tcgctacca tagttatttg 600
 tcttttgat ttagtagttg accttctaac taagactcat ttctctacag tgaaaaagag 660
 aaaaacgttt taatgtcacc tcaaagaaat gcagagtga gggtgantga aattaanttg 720
 aaggtatcan 730

<210> 4862

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4862

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agacaggagc agtcattccc ttgtagggac aactagaaga aattttatga ataagcatca   60
gaagccagtg ctaacaggcc agcgggtcaa aactcggaaa agggatgaaa aaganaaatt  120
cgaacccaca gtcttcaggg atacacttgt ccaggggctt aatgaggctg gtgatgacct  180
tgaagctgta gccaaatttc tggactctac aggctcaaga ttagattatc gtcgctatgc  240
agacacactc ttcgatatcc tgggtggtgg cagtatgctt gcccctggag gaacgcgcat  300
agatgatggt gacaagacca agatgaccaa ccactgtgtg ttttcagcaa atgaagatca  360
tgaaaccatc cgaaactatg ctcaggctct caataaactc atcangagat ataagtattt  420
ggagaaggca tttgaagatg aaatgaaaaa gcttctcctc ttccttaaag ccttttccga  480
aacagagcaa gacaaagttg gcgatgctgt cggggattct gctgggcaat ggnaccctgc  540
ccgccaccat cctcaccagt ctcttcaccg acagcttagt caaagaaggt aacgaggctc  600
ctgttttctc gcctgtcaag acaacanang aaaaatanag tcacagatag ttagaaaaaa  660
tgccaggggc tctttttggg gtcctccaat actcattcct tcatttaaga gaatatcttt  720
gtatgggggtg gtanattgcc ctttcaaatt agtaaaaggg agngggncct gttaatttgt  780
agggaaaagg                                     790

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<210> 4863

<211> 600

<212> DNA

<213> Homo sapiens

<400> 4863

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gcttcccgtc cgctgtcctc tgctgccagt cccctgcccc gggcaaagcc catctgggtcc   60
gccgagcagg ccggagctat tgggagtggc ggatcctccc accccagccg gatctggggcc  120

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atggccgagc ctggagaggg actgccagag gaggtgctgg cactcatctt ccgccacctg 180
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 ccggggctgc gaggcctgcg cctggagtgc cgcggagaaa aaccgctctt cgacgcgggc 480
 cgcgacgtcc tggaggctgt gcacgtgta tgcggggcgg ccaaccagct acgccaactc 540
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<210> 4864

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4864

gaaccaggga ggcagaggtt gcagtgagcc aagatcatgc cactgcactc cagcctggcg 60
 acagagcgag actccattta aaaaaaaaaa caccagggca tctgtaagcc actttgggag 120
 tcaaaagaat gtagagctgg gctggactcc ttagaagaaa gttaagttct gagtgtggga 180
 ggaagtgcct gcacccccac atccagacag ccgctcactc ctgctgccga agactgactt 240
 gctgattcgg gctctgcctc catagtgggg gcacagagcc agggagagtg cccacaggcc 300
 cagggatcct ggggtgtggga ccagggagaa tgcccacagg ccccagggcc tttttgagcc 360
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 cctgctgttc ctgctgcaga tcaaggacag acacaacggc aacattatgc tggacaagaa 480
 gggccatata atccacatcg gtcagccagc cacagcgcca cctcctctc ccttcacccc 540
 ggcacccagg ggtggatagg gatccccacc ccacagagag gagaatgccc aagaccaccc 600
 tgccaggagt gtcanggtcc aactctgagg tccgaactgt cggncaccaa nctgttctgc 660
 tgtaaaaggt gcctgggccc cgagg 684

<210> 4865

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4865

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tgaaaaccag cttgtagtta gggcccggag cgcatgccat agactcggcg actcaggaat   60
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cctccagtgc ccccagtact gggcgtgagt ccggaagtgg ccacaacca gcctggaccg  180
tcgcttataa agctgtgtaa acctgtataa gctcaggcgt tgacagctgg aaggcagctg  240
gcactggcag ccccttcat tgcacctatc tccccatct cattgccacg gctgaaccct  300
ccttctcaat cttggaacag cacccttc ttttaagtccc ccaggaccg acagcctgag  360
ccagatttct actgtgtcaa gtggatccct tggaaaggag aacagacacc catcatcacc  420
cagagcacta acggcccttg cctctcctt gccatcatga acatcctctt tcttcagtgg  480
aaggtgaagc tcccccgca gaaggaagtg atcacatcgg atgagctcat ggcccatctt  540
ggaaactgcc tctgttccat caagccccag gagaagtcag agggacttca gcttaatttt  600
cagcagaatg tggatgatgc aatgacagtg ctgcctaaac tggncacaag tctggatgtc  660
aatgtgcgat tcacaagcgt ctctgatttt gggatatacaa ccgaggtgca atgtcctttg  720
accctgctan ggaataacct cgttacaaag gggntgggct tgtttgattc caaaaaa   777

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<210> 4866

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4866

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gtgtcactcg gcccgtcgg cgcgccctt cccagccgcc ctccgtacc ggctctcggg   60
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ctccgagtcg cccctgcgga ctggctctgc acagtgcctg ggcaccgggc gccagacaga  180
cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgctc cggggccacg  240

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agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 300
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 tatcatctgg gaanaatttt gggacattac ttaatgggtt catgggacac caactgctaa 600
 agtctggctg aatgncaagt gcatgatgan ctgcagggg tcatacagat gcggtgtggg 660
 cgggtnaaga tcttacctga aacaagggt taaatgttt 699

<210> 4867

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4867

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 gcttcttcct cacgggtgctc cagctccaca caccgtactg agcctcgcca gccaccgtac 180
 gcgaggtcgc ggcggtccg tgacgtcact gatgtgcgt tctccgcac taagggaac 240
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 cgacggggcc tcacggtccg cagtcctgac gaaccctgc cgggtggtgc catcccagt 360
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 gaaagctctc gtctaagggc aactttgctg acctgggcct ggagccccgt gtgctgcacg 660
 cactnaaagg gaaggnttgc gccttgaang tcgtttaagc ccaaaaaccg gtggcaattc 720
 caa 723

<210> 4868

<211> 698

<212> DNA

<213> Homo, sapiens

<400> 4868

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ataacgagga cacagtgagt gagagggtac aataatgaga ggcaggaagc ggaagactgt   60
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tacgttgga  tcaccttgga atcagctggg gatctttaaa ggtgtttctg cctggctccc  180
caccacagac cttgtgattt aattcaccag ggggtgtggca tggcattggg gtttccaaag  240
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gtccctaaaa agtgtttttc atcgttctct aatgttanga tggttggatg tctgaaggaa  540
agtgttgna  ttcttaaaag tactagaaat ctgaaacca agttatgttt ttaaataatgt  600
tttgaatttg ataacttaat aaattgtaat taattaaagt catgtttaac actgggaana  660
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<210> 4869

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4869

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attaatctgg ccgtgccatg catctactcc atgttcaggc ttgtggagag gtacgagatg   60
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ggcattcttt gttactattg gctcaacacc gtggccctgt ctggtgaaga gtgttgggaa  180
accctcattg gccaggacat ctaccggctc cttctgatgg attttgtgtt ctctttagtc  240

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aattccttcc tgggggagtt tctgaggaga atcattggga tgcaactgat cacaagtctt 300
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 ccccttttcga ggtctgcctc tcttcattca ctccatctac aagctggntc gacaccctaa 660
 gtacaagggc ctgggctacc tgtgggggtt tttggatcta accgggaacc tcaatgggaa 720
 gttgtgcact tctttttcaa cctcaancct catttgnggc taaancatca accctaa 777

<210> 4870

<211> 526

<212> DNA

<213> Homo sapiens

<400> 4870

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 caggccgcct ttcgagcgct ttgtgtccat gaaccgcggn atcaacaatg gtagcgacct 180
 gcccgaggac cagctgcgga acctcttcga cagcatcaag agtgagccat tctccatccc 240
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 ctgcctctac tacttcgagt tcaccactga caaggagcca cggggaatta tacctcttga 420
 gaacctctcg gtgcanaang tggatgaccc caagaagcca ttctgcctgg gagctctaca 480
 accctagctg ccgaggccag aaaatcaang cctgcaagac cgatgg 526

<210> 4871

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4871

cagcagattt aggcattgga gatctaattc ctgtggatgt taaccatttg aacatttgta 60
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tagccaaaga ccttgaaaac taacagttgt gctcttcag tttcatatg tgaattcagt 180
gcaagaaact tgggtgtctg tttcttcttt taagctctat gcaatcatgc aaacatagtg 240
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tggagcaaag ctgctgtgag agagtgtcct tccccatctg tgactttcct ggtgcatcca 480
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atttgctgta cttttttaa gtttgagttt ttagctcagt tctaccttt atctgacaca 660
ttattactaa gtggttaact ttgttagact taantggcat gtccggggtc aagtccctt 720
gnatcnaatt ttccgta 737

<210> 4872

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4872

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aagaaacttg aggctaggct gaccccatgg ttgttatgat tagaaatccg aggccactgg 240
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 agcttcaggt ctcccgcccc tgtcccggtg cctctcctgc aggacggaac tctgtgggaa 600
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 a 661

<210> 4873

<211> 648

<212> DNA

<213> Homo sapiens

<400> 4873

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 ttcagatggc tcaactctgct caagcaaaac taaaatctcc tcaagctgtg ttacaactcg 540
 gagtgaacaa tgaagattca aagagcctgg agaaaagtgc tgtggnattc agtcacaagg 600
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<210> 4874

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4874

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 aagatatgaa gcaggaccgg gacattcagg cagtggcgac ctccctcctg ccactgacag 360
 aagccaacct acgcatgttt caacgtgccc aggacgacct tatccctgct gtggaccggc 420
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 tatcccgtg 490

<210> 4875

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4875

taaaataaaa taaaataaaa ataaaagttt gcagtttaca caatcaatcc tggaagcatt 60
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 ctgtcataat gtatccagaa attcaattag agagagtgtg tgtttctggg ccaacagagg 180
 caaggtagg gggcagaggt aatataagt agctggccca agccatgcaa cttagcctca 240
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 gtccagatgt gctctgtgcg tgcattggat ggcttccaat aaagtcaa gacacagtca 360
 cgtgtcagtt taggtcctct aggaaacaga caccagagag aatgagaagt gcaagtgaca 420
 tattggggga tgcctatgaa agacaaagg gagaggagc aggatgaggt gggaaggctt 480
 cagactgtga cacaggtgtg ccacctgtga aaagtgaagg ggaaagaagc agcattctca 540
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 ctaaagggtg cccattanag aagtctcggg cctagtgtcc cagccacatg gagtgtccca 660

gagagcgcan ctttggtgtg agctctgagg gancaagtcc tccttgaggg tctctgaaag 720
gaagatntaa gctgtgcact tcttgggctg ccttaattta 760

<210> 4876

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4876

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cattttaaaa tcctgtgcgt ttatcttcat tttgctgggc agaaagccaa agtactggac 180
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caagggaagt cctgaaaacc caaactatgc tctcaaatgt actcttgtgg gacacacgga 360
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agatgataaa actctaaaat tatgggatgt gagatctgga aaatgtttga aaacactgaa 600
ggggcacaag taattatgtc ttttgttgta acttcaatcc gccatccaac cttataatct 660
cgggatcttt tgatgaagac tgtnaaaata tgggangtga aaacaggaaa gtgtctcaag 720
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<210> 4877

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4877

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 atcactttga gctcaggagt ttgagaccag cctgggcaac atggggagac ccttcctcta 180
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 caccaccgca ctccagcctg ggagacagag tgagaccctg tctccaatat atatatatat 360
 taaataaatg gttaagagct aaccaaagca tatagaggaa tagctttata gcaaataatg 420
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 ggcaagagga cccagcatga ggcacaagga gttcaaggct aagggtgaag ctatgaataa 720
 tgccctgcaa cttcancctt gggtgacaag accaagaant tccaantca aattttttaa 780
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<210> 4878

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4878

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 tttctctctt tgttgtttaa ggtattaagc acgaattatt acatgagact ggcagatagc 180
 tattaatcct cttacagatt tgagaaagtt gattctcaaa tatttatgca ccttctcctt 240
 cattgttttc tttaaactcg tcctcttaaa aagcttctta agagctcagt taatgctttt 300
 gacttaacta ggagaaaaag gcatgataat acaggcaaga tggcattggt agcaattctg 360
 gtagtggttt ggaatgaatc ctaagaggca gggatcttaa ggacaaggaa gagaagagag 420
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tgttctcaat tcattcatat tattaagctc ttcctgcagt tgatatctga gcagagtaag 540
 atttgtattt ccatttttac ttttttgaag gagaatatat ggacagatta ttagtacaat 600
 ttgggcactg tggttttaag aatatctgag taaaataaca atatgannta ataaacagaa 660
 gctctaacgt caggtaacaa atagacagca agaaaggntt gcaccatcct cctaagggct 720
 aa 722

<210> 4879

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4879

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 caccgcaggc ccctggccac tgaaagagtg tgcagtggac tgtgggtctc ccatatgcgg 180
 tgccgcccac aggtggcttt gcctcaagca acctaccctg atgttttact cattggaatg 240
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 cctgcttgaa tctgttcgtg ggcaaagggt tgggggaatt tgtgaccctg gnacatcccc 660
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<210> 4880

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4880

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aaaaagaaga actcaaagat acacaaagta atttgaacca aggctcagaa gtttttggag  180
ccgtgaggga tacagcagtt tggtaaatat tgtcttaaca tgcttcaaat aaatcagctt  240
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gcagtataaa gaaggctcag caggctgttg ccaataaagc ttgactgaa tctacgcttc  480
ccaaaccagt tcagaagcca cccaaaagta atgttaacaa taaccaggc agtataactc  540
caactgtggn actgaatggg cttgctatga aaaggggaga gcctgccatc tacagggcac  600
tagatccaaa gccattccca aattatagag ctaattacaa ctttcngggc aatgtacaat  660
cagaggtatc attgcccatt gcctaagatc ttttaagttc agcctcactg gtgggaaatt  720
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<210> 4881

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4881

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tttctttctc tctccctttg ttgttatattg atttggggga agggagttag gcttgtgcag  180
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cattcaaaag tgaacacact tggtagctga accatatctg agcagcgtga ttctgttgtc  300
ttgcatatgt tattctctca ggctgtggat ctttgttaca gctctaggaa actgtagaaa  360
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ttttttccca ataacctgtc ttccaggtgg tacagttagc tgtcactcag ctgacacccat 480
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 aagtctcan cagcactacc ttagacttca ggagctaata ggaaactttt tatgggtgtaa 600
 atgctgtaag actttgtaca tacttcagtt gttangaaat ccttanagaa aaaaagaaaa 660
 agttacgcta ataaattgct gtggtgcaag gcactaatgg ggggtgggttc nccttg 716

<210> 4882

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4882

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 taccgataaa acaagtgggtg gtccaagtag tggaggagggt tttgtagatt ggacttttacg 180
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 ttcagaaaag ttacaggagt tttcatttta ggccctgcac ttcctgggct caaagggaac 720
 nttggaaatt gcantgggat ccagattatc cactgcagta aattattggg aaaatggntt 780
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<210> 4883

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4883

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tgggcatata gcatattttc ctgcaatgaa aagcgtttgt gaacttacct acagaaaatg   720
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<210> 4884

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4884

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ccagtctcca ccagaagttc gggattgcaa aatgggactc tggcagcaaa tttaaactg   180
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gctgaatagg aacagctctg ctctgcagct cccagcgaga tcaacgcaga aggagataat 300
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<210> 4885

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4885

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<210> 4886

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4886

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gccatttagg agctctgtc aaagccagac gtatcctaga aggaaaacat caccatggct 180
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<210> 4887

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4887

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caatgcagaa atacccaaac cctatgaacc caagtgtgtg tggagttgat gtgttgagca 180
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<210> 4888

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4888

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 catcggggga ctgctacctg ctctctgccc cggggcccca cgtcctgctt ctggggatca 660
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<210> 4889

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4889

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acaccctgat ttcgaaccga gcactgaatc tctccagttc ttgttagata catgtaaagt   180
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cgacactttc tatcgacaat ttcattattat tgtatgtgga ctggactcta tcatcgccag   480
aagatggata aatggcatgc tgatatctct tctaaattat gaagatgggtg tcctanatcc   540
aagctccatt gtccctttga tagatggggg gacagaangt tttaaaggga atgcccgggt   600
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<210> 4890

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4890

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acaaaattgc atcaggcccc acaacagctg cttgcatgga atagcagaga ataccgcctg   180
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cactttcctt atttactgaa tgagtggagg gcagagacag gcctggagtt acgcacactg 300
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<210> 4891

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4891

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 gtgcantttg ggtgggtttt tagcaatcct aaatcctgag cacaagaaga ttatataaag 720

cgaagtggcc ttcaatttga tgttccccg gtaatgaatc ccaatacacc ccaatggagg 780
caagcaattt tccccggtcc aangggcaaa tggtttggcc caatcaaaaa ttttcngn 838

<210> 4892

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4892

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tagtacgaat gcttcccttg agatatttga attagacctc tctgatccat ccttggatat 240
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gaatgacaag catactggcc cagtgaagac cttggatgtg aacattttcc agactaatct 480
ggtagcttct ggtgctaata aatctgaaat ctacatatgg gatctaaata attttgcaac 540
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cagacaagtt cagcatattt tagcatcagc cagtcccagt ggncggggcc actgtatggg 660
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ctgggttg 729

<210> 4893

<211> 592

<212> DNA

<213> Homo sapiens

<400> 4893

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cgccagttag ccttggggagg ccagagagat ancgccggca tgggaccac tcagtcaaga 480
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ggcaaactcc tggggggccan cctggggcga aagggggcaa cttccgcatc nt 592

<210> 4894

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4894

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ttagtttata gaaaagttaa gtgacatcag gataaattga tatttattat atgaaagtta 180
tgaaaacttt tgtatagttg ctaagtagga ttaaaaaatg agtatcagaa ttttggtaaac 240
acagccagag atacatttca tttgcacaca aatgtttttg tgaggtttct ttttcagtta 300
ggaaaatcat taaaatcatg tactgatgta aactaaactt agtaccggac tttcaaata 360
cttgattcca aagttttaat caaggttttt aaaaataaag tattttcaat tataaaatga 420
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atatatttaa tcctataaaa tttcttttgt aataactatc tgcagagtag catatttgtg 540
atttataaat atttatatgct cagaatcctt gattgataag agcatatgat taaaaaatga 600
aaacacattg tagagttatt catagtcaca tatggtatgt aactgaatat atatgatata 660
tataatataa ataaatatat ttaaaataca tatttatata taaatatgta ttatatataa 720

atatatatca tatattanan antaatataa ccaaat

756

<210> 4895

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4895

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ccatcctact tcctttatag ctgtttcact tggaaactaa tgtgtgggag cacctcctgc 180
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gaatgctaatt ttttaccttt cagctatgtg aaaacacatg atttacgttg atgtaaccga 480
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tgctttaacg tgacagctgc gtggaagaaa taatggttgg gcaaacactt ttctattgan 660
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<210> 4896

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4896

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cctcttgtaa agttaactac ttactttttt gttgttgttt ttttaacatc aggttctgta 120

tctaatagga gatgtaacac tttatttcat ggcaggcttt tattgcagag acttgaagtc 180
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 gctttacaac ttagtgTTTT ttgctatcca gataacaagt ttcatTgttt agaaccagt 600
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 tacatttgtg ctctctctct ctgtttttct cccttctctt tccaagttaa gatnaagata 720
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<210> 4897

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4897

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 cgaagccatc gtcacactga ctcttggttg cacacaagtg aactcaatga tggctatgat 180
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 cgccagctct ggagagtcac tgagagaagt gatattgtgg tccagatagt agatgctcga 600
 aaccactcc tgtttaaatg tgaggatttg gaatgttatg tgaaagaaat ggatgcaata 660

aggagaacgt cattccgata aacaagggaa gacctggctg aactgctgaa gcaaccggna 720
ntgcctgggg ccatgttcct tcna 744

<210> 4898

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4898

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ccttcatact gtaaacaatgg tttagacacg gtcataaggga aggctgctgg tccatcattt 180
gttctgaaca aatggcattt cctgctcctg accctggcag ttggccccag attccttgct 240
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tgtccacata aagtaagtcc aagggctatc atatggctaa aatcaagntt atttgggtca 660
acccctggta tgtatttata aagtcaactt atcagccatt taagatggng atttgcntta 720
aatttttgca atgtgtgtgg ca 742

<210> 4899

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4899

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 aaggagcgat tcttcatttt ggnacccttt ccttattttc tgggtaccat gagaaattgt 660
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 tggttgcata ccattctgcc aatgaaagga ancaaaa 757

<210> 4900

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4900

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 gaagagagca ggatttgtaa agccctgttt ttatacactt cacatttgcg gaaatataat 480
 gatgccctca ttatcagtga gcatgcacga atgaaagatg ctctggatta cttgaaagac 540

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<210> 4901

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4901

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 ctcttgattc acaagttgtt caagccttgt ttgaagatac aagatataga gaagactgta 660
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 aat 783

<210> 4902

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4902

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 aanttcccn 609

<210> 4903

<211> 620

<212> DNA

<213> Homo sapiens

<400> 4903

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ggtcctgccc tttngggggg 620

<210> 4904

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4904

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gagtacacag tcattaatga agcctgccct ggagcagagt ggaatatcat gtgtcgggag 180
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tcgtgatgga gacaaccgag atggccaaat natcaagcgt gtctgtggca acgagcggcc 660
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<210> 4905

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4905

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 ggtacacaga gggctataat cagagatcga gcagcttttag agaaacaaga aaaacagctg 360
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<210> 4906

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4906

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 agagctccca gaagtggatg tgaagtcgga gcactcaggg aagaaggttc agtttgcaga 240
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agaagagagg ttggatatag aggctgtagt gcaccaaga gaagtggatc cgtttaatct 600
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<210> 4907

<211> 759

<212> DNA

<213> Homo sapiens

<400> 4907

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 tgtcttttaa acatcctcat gttgcaaacc cagcacttca aatggcctct ccagaggaga 180
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